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THE FUNCTIONS OF SELF-INJURY AND ITS LINK TO
TRAUMATIC EVENTS IN COLLEGE STUDENTS

A Dissertation Presented

by

LAUREL ANN ALEXANDER

Submitted to the Graduate School of the
University of Massachusetts Amherst in partial fulfillment
of the requirements for the degree of

DOCTOR OF PHILOSOPHY

May 1999

Psychology

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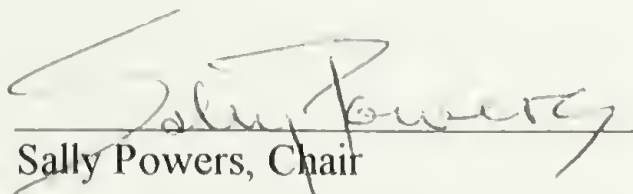
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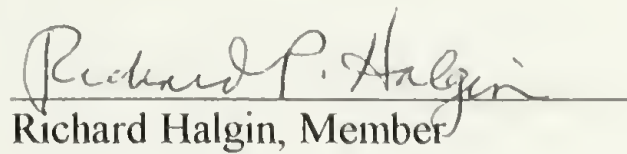
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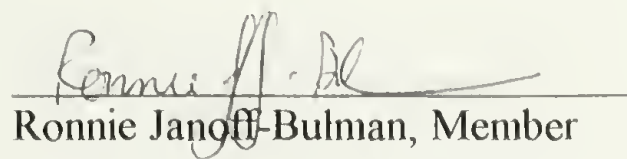
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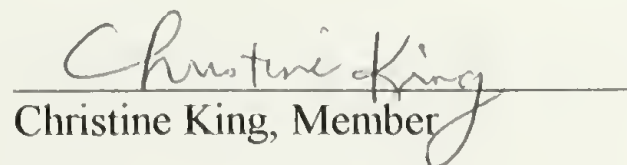
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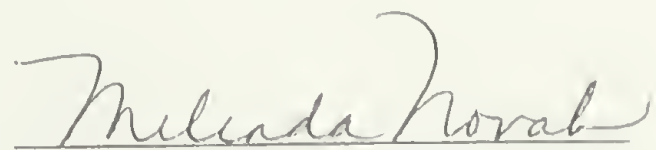
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DEDICATION

For their tireless encouragement, constant faith,
selfless generosity, and great love,
I dedicate this dissertation to my parents John and Margie Alexander.

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ABSTRACT

THE FUNCTIONS OF SELF-INJURY AND ITS LINK TO TRAUMATIC EVENTS IN COLLEGE STUDENTS

MAY 1999

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The phenomenology of self-injury in a non-clinical undergraduate population was investigated in two studies. In Study 1, 244 undergraduate men and women completed measures of demographic information, trauma history, posttraumatic symptomatology, and history of self-injury. High rates of overt and indirect self-injury were found in this non-clinical sample. The variety of self-injurious behaviors increased as severity of trauma history and posttraumatic symptomatology increased. Reasons typically identified by clinical populations for engaging in self-injury were also seen in this sample across a wide range of self-injurious behaviors.

Study 2 was a replication and extension of Study 1. In Study 2, 214 undergraduate men and women completed measures of demographic information, trauma history, and posttraumatic symptomatology as well as a revised version of the self-injury questionnaire. High rates of indirect and overt self-injurious behaviors were again found in a non-clinical sample. For indirect self-injury, trauma history and posttraumatic symptomatology interacted to predict variety and frequency of indirect self-injury. That is, for participants experiencing relatively low levels of posttraumatic symptomatology, variety and frequency of indirect self-injury were positively associated with more severe trauma history; however, for participants experiencing higher levels of posttraumatic

symptomatology, there were no systematic relations between variety and frequency of indirect self-injury and trauma history. In contrast, for overt self-injury, more severe trauma history and posttraumatic symptomatology positively predicted variety and frequency of overt self-injury without an interaction effect. Reasons typically identified by clinical populations for engaging in self-injury were associated with both indirect and overt self-injurious behaviors.

The findings from these two studies serve as a starting point for further exploration of the phenomenology of self-injury and its link to traumatic events in non-clinical populations. Given that indirect self-injury appears to serve more serious functions in non-clinical populations than previously thought, a better understanding of its functions and psychological sequelae will enable mental health professionals to approach these issues more effectively. If overt self-injury is, in fact, reaching epidemic proportions in non-clinical populations as has been suggested, then more information is needed to understand how best to conceptualize and address self-injury in the general population.

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INTRODUCTION

Literature Review

Self-injury is a class of behavior that causes physical or psychological harm to the individual. There is a broad continuum of self-injurious behaviors differing in the extent of harm caused, directness of intent, and level of acceptability to society. Connors (1996) has conceptualized self-injurious behaviors as falling into four categories. "Body alterations" consist of deliberately selected changes to the body, such as body piercing or cosmetic surgery. These behaviors are often sanctioned by the culture, but may be used by individuals to harm themselves. A second type is "indirect self-harm," which is behavior that indirectly causes psychological or physical damage to the individual, such as smoking, fasting, or excessive exercise. "Failure to care for self" involves risky or careless behaviors, such as reckless driving or not seeking medical care when sick or injured. Finally, "overt self-injury" consists of behaviors that directly harm the self without apparent secondary gains. Examples of this category are cutting, head banging, and burning. Overt self-injury is the most easily defined set of behaviors that harm the self. The intent of the other three categories of behaviors is more difficult to discern, but they can all be used for the purpose of injuring the self.

Over the past 20 years, researchers and clinicians have become increasingly aware of the link between self-injury and psychological trauma in clinical populations. Estimates of the prevalence of overt self-injury in clinical populations range widely from 4.3% of all psychiatric patients (Darche, 1990) to 92.5% of forensic inpatient psychiatric patients (Swinton, Hopkins, & Swinton, 1998). Researchers have determined that the vast majority of all psychiatric patients, both inpatient and outpatient, have a history of psychological trauma (Briere, 1988; Briere & Zaidi, 1989; van der Kolk, Perry, & Herman, 1991). Self-injury appears to be more common in patients who have disorders that have been linked to psychological trauma, including borderline personality disorder, antisocial personality disorder, and dissociative identity disorder (Briere & Zaidi, 1989;

Brodsky, Cloitre, & Dulit, 1995; Favazza & Conterio, 1988; Favazza & Rosenthal, 1993). While much of the evidence linking self-injury to trauma has been anecdotal or theoretical to date, there is some empirical evidence to suggest that traumatic events lead to the development of self-injury (Greenspan & Samuel, 1989).

Although self-injury has traditionally been conceptualized as a manipulative gesture designed to avoid abandonment or to elicit caregiving from others, researchers have more recently come to understand self-injury as serving adaptive functions (Connors, 1996; Favazza & Conterio, 1988; Kemperman, Russ, & Shearin, 1997). Four primary functions discussed in the clinical and research literature are regulation of dissociative processes, re-enactment of traumatic events, modulation of tension, and regulation of feelings (Connors, 1996; Favazza, 1989; Favazza & Conterio, 1988; Himber, 1994; Kemperman et al., 1997).

Many trauma survivors who self-injure report doing so to regulate dissociative states (Connors, 1996; Favazza, 1989; Himber, 1994; Kemperman et al., 1997; Shearer, 1994). For these individuals, seeing blood or feeling pain can serve to bring them out of a dissociative state and combat the feeling of "dead-ness" that can accompany dissociation (Connors, 1996; Shearer, 1994). Ironically, the act of self-injury can help survivors feel more alive. For others, self-injury is used to trigger a dissociative state, enabling them to escape or distance themselves from their current distress or situation (Himber, 1994). In the extreme case of individuals with dissociative identity disorder, self-injury may reflect a struggle between personality states (Connors, 1996; Favazza, 1989).

Self-injury may also serve as a re-enactment of traumatic events (Connors, 1996). Trauma survivors may engage in self-injury to try to master an earlier, uncontrollable situation. They may feel more in control knowing that they, not the original perpetrator, are hurting themselves this time (Connors, 1996; Shearer, 1994). For some trauma survivors, self-injury may reassure them that the traumatic event was real (Connors, 1996). Relatedly, self-injury may also represent the survivors' attempt to let other people

know what they have experienced (Connors, 1996). This need to communicate may stem from the survivors' inability to verbalize their memories of past experiences or from the perpetrator having prohibited the survivor from disclosing the abuse. Part of the communication involved in self-injury may also reflect a call for help or support from others in times of need (Himber, 1994).

Some trauma survivors report engaging in self-injury to modulate feelings of tension. Traumatic events can leave survivors with a limited capacity for self-soothing, and self-injury may be used by some survivors to calm themselves (Connors, 1996; Darche, 1990; Favazza, 1989; Kemperman et al., 1997; Zlotnick, Shea, Pearlstein, Simpson, Costello, & Begin, 1996). The feeling of calm that follows self-injury is described by some survivors as a pleasurable, relaxed state (Himber, 1994). Temporarily, self-injury can release unbearable tension. For other trauma survivors, self-injury may instead induce sexual or physiological arousal (Connors, 1996; Favazza, 1989; Shearer, 1994).

Regulation of feelings is an important function of self-injury for some trauma survivors. Self-injury may allow survivors to vent feelings that they deem unacceptable or shameful, such as anger, rage, guilt, and sexual arousal (Connors, 1996; Favazza, 1989; Himber, 1994). They may feel unable to express these feelings except through self-injury (Zlotnick et al., 1996). Survivors may feel "purified" of these unwanted parts of themselves following self-injury (Himber, 1994; Shearer, 1994). Some survivors report using self-injury to release rage and other negative feelings on themselves for fear that they may hurt someone else otherwise (Connors, 1996; Himber, 1994). Self-injury can also serve as a means for expressing overwhelming emotional distress or distracting from it (Connors, 1996; Zlotnick, Donaldson, Spirito, & Pearlstein, 1997). When emotional pain becomes so great that the individual contemplates suicide, self-injury can be used to minimize or avoid distress, thereby preventing suicide (Himber, 1994). Although it may

appear that the self-injurious individual is suicidal, self-injury may be the very behavior that is forestalling suicide.

The vast majority of studies on self-injury to date have been conducted in clinical adolescent and adult populations. As has been noted by innumerable trauma researchers, while the majority of psychiatric patients have a trauma history, only a minority of trauma survivors develop psychiatric difficulties. Little is known about the rate, variety, and functions of self-injury in trauma survivors in non-psychiatric populations or whether self-injury exists in individuals without a trauma history (or organic or psychotic disorder) in the general population. One study utilizing a non-clinical sample of adolescents demonstrated that overt self-injury does exist in this population and that it is linked to stressful life events (Garrison, Addy, McKeown, Cuffe, Jackson, & Waller, 1993). However, it appears that no researchers to date have examined the functions of self-injury and its link to traumatic events in non-clinical populations. As the media reports a growing epidemic of self-injury in America (Egan, 1997), information about these phenomena is needed to understand how best to conceptualize and address self-injury in the general population.

Statement of the Problem

In two studies, the phenomenology of self-injury in college students was examined. In Study 1, undergraduate men and women's involvement in a wide range of self-injurious behaviors was examined. College students completed measures of their lifetime history of involvement in self-injury, reasons for having engaged in self-injury, trauma history, and current posttraumatic symptomatology. The variety of behaviors in which participants engaged was considered as were participants' self-reported reasons for having done them.

Study 2 builds on the first study in several ways. It provided an opportunity for replication to assess whether the findings from Study 1 were due to sample specific variability or measurement error. For this purpose, the same variables were examined with

another large undergraduate sample. To address the issue of potential measurement error, the researcher utilized a refined version of the self-injury questionnaire created for these investigations.

Study 2 also extended the findings from Study 1 by examining the frequency with which undergraduate men and women engaged in self-injurious behaviors in addition to the variety of behaviors. Whereas in Study 1 participants were simply asked whether or not they had ever engaged in various behaviors, participants in Study 2 were asked to indicate the frequency with which they had participated in self-injurious behaviors. This addition allowed the researcher to determine whether undergraduates who varied in the frequency of self-injury differed in their history of trauma, current posttraumatic symptomatology, and self-reported reasons for self-injury. Most research on self-injury to date has neglected to assess frequency of self-injury, but some researchers have indicated that there are important differences between individuals who try a form of self-injury once and those who do it regularly (Evans, Platts, & Liebenau, 1996). It is hoped that the findings from these two studies provide a substantive contribution to our current understanding of the rate, variety, and functions of self-injury in college students and its link to traumatic events and sequelae.

CHAPTER 1

STUDY 1

In Study 1, self-injury in a college sample was investigated to determine the prevalence and variety of self-harm, its link to traumatic events, and its function in a non-clinical, young adult population. Undergraduate men and women were asked about their trauma history, current posttraumatic symptomatology, and history of self-injury. It was hypothesized that the variety of self-injurious behaviors would increase as the extent of trauma history and posttraumatic symptomatology increased and that these relations would be seen across the full range of self-injurious behaviors described by Connors (1996). It was further expected that there would be a greater variety of self-injurious behaviors in students who more often reported engaging in the behaviors for purposes typically identified by clinical trauma populations.

Method

Operational Definition

For the purposes of this study, self-injury was defined as behavior that causes psychological or physical harm, either directly or indirectly. Each of the 4 categories of self-injury delineated by Connors (1996) were examined (i.e., body alterations, indirect self-harm, failure to care for self, and overt self-injury).

Participants

A total of 244 undergraduate men ($n = 52$) and women ($n = 192$) were recruited from undergraduate psychology courses at a large northeastern university. Recruitment was done in classrooms and through a central recruitment desk, where all psychology studies are advertised. The study was advertised as a project on "risky behaviors in college students." Respondents received extra credit for their participation. The mean age of participants was 21. For year in school, 10.7% of participants indicated that they

were first-year students, 25.4% were sophomores, 31.6% were juniors, 27.9% were seniors, and 4.5% were non-traditional students (e.g., continuing education students).

While the sample was largely composed of European-American students (70.5%), 5.3% of participants identified themselves as African-American, 8.6% identified as Asian-American, 5.3% identified as Latino/a, 3.7% identified as Native American, and 5.7% indicated another ethnicity. For religious preference, 56.6% of participants self-identified as Catholic, 11.5% identified as Jewish, 1.2% identified as Muslim, 11.9% identified as Protestant, 14.8% indicated another religion, and 18.4% indicated that they had no religious preference. For sexual identity, 3.7% of participants identified as bisexual, 95.1% identified as heterosexual, 0.8% identified as homosexual, and 0.4% indicated another sexual identity.

In terms of father's education level, 5.7% of participants' fathers had completed some high school, 21.3% were high school or trade school graduates, 16.0% had completed some college, 25.0% were college graduates, and 30.3% had completed some graduate training or had graduate degrees. In terms of mother's education level, 6.6% of participants' mothers had completed some high school, 29.1% were high school or trade school graduates, 18.0% had completed some college, 24.2% were college graduates, and 21.3% had completed some graduate training or had graduate degrees. For total family income, 8.6% of participants reported an income of \$15,000 or less, 15.6% reported \$16,000 to 30,000, 25.0% reported \$31,000 to 50,000, 32.4% reported \$51,000 to 100,000, 16.0% reported over \$100,000.

Nearly half of participants (43.4%) reported having seen a therapist or other mental health professional, 8.2% reported having taken psychiatric medication in the past, 3.7% stated that they were currently taking psychiatric medication, and 3.7% reported a history of psychiatric hospitalization. For social functioning, 64.3% of participants reported having had a time when they avoided friends or relatives or had many more fights with friends or relatives due to emotional problems. For occupational functioning, 71.7%

of participants reported having been unable to work, having had trouble performing at work, or having been unable to work around the house due to emotional problems. For self-care impairment, 7.8% of participants reported having had a time when they were unable to take care of themselves (e.g., bathe or feed themselves) due to emotional problems. Over half of participants (59.0%) reported a family history of therapy, psychiatric medication use, or psychiatric hospitalization.

Procedure

Group administration of questionnaires was conducted. Having read and signed the consent form, participants answered a demographics questionnaire. Next, participants completed the Self-Injury Questionnaire (SIQ; Alexander, 1997) to assess lifetime history of self-injury and its functions. The Traumatic Events Questionnaire (TEQ; Vrana & Lauterbach, 1994), which assesses exposure to traumatic events, was then administered. The final questionnaire administered was the Trauma Symptom Checklist - 40 (TSC-40; Briere & Runtz, 1989) which assesses current posttraumatic symptomatology. The last 80 participants were asked to return for a second session two weeks later, at which time they completed the SIQ again to allow for the assessment of the SIQ's test-retest reliability. At the end of testing, participants were given a debriefing form that more fully explained the purposes of the study.

Measures

Demographics Questionnaire

The demographics questionnaire was created by the researcher. It includes questions about the participants' age, gender, year in school, socioeconomic status (as determined by annual family income and parents' education level), ethnicity, religion, and sexual identity. Participants were also asked about their history of occupational and social

functioning, their history of psychological treatment, and family history of psychological treatment.

Self-Injury Questionnaire

The SIQ (Alexander, 1997) is a 46-item, self-report measure of self-injury history. It was constructed by the researcher from the self-injury literature and pre-existing measures. The SIQ covers the broad continuum of self-injury delineated by Connors (1996) by including body alterations (e.g., body piercing, tattoos), indirect self-harm (e.g., smoking marijuana, fasting), failure to care for self (e.g., avoiding the doctor when ill, having unprotected sex), and overt self-injury (e.g., cutting, burning). Participants are asked whether they have ever engaged in any of 46 behaviors on purpose. If they indicate that they have done a certain behavior, they are referred to a list of 29 reasons. Participants are asked to indicate all of the reasons why they have engaged in each behavior because researchers have suggested that self-injury serves multiple purposes (Connors, 1996; Himber, 1994). The reasons assessed in the SIQ cover a broad range of functions, including neutral ones (e.g., "for fun" or "I do not know why") and more emotionally charged reasons (e.g., "to see blood" or "to punish myself for something").

Behaviors from the SIQ can be looked at individually, as a summary total of all behaviors reported (i.e., SIQ total), or as a subtotal for each of Connors' self-injury subtypes (i.e., Connors 1 subtotal [body alterations], Connors 2 subtotal [indirect self-harm], Connors 3 subtotal [failure to care for self], and Connors 4 subtotal [overt self-injury]). The reasons can be analyzed individually or grouped according to 8 common themes (i.e., regulation of feelings, regulation of real-ness, safety, communication with self, communication with others, fun/rush/pleasure, social influence, and regulation of bodily sensations). The specific reason items that comprise these categories can be found in Table 1 (see p. 18). Whether analyzed individually or grouped, each reason is expressed as a proportion that the reason is endorsed across behaviors.

The SIQ has good face validity, and findings from Study 1 suggest that the SIQ also has good predictive validity. Test-retest reliability of the behavior items, summary scores, and 8 reason categories was assessed. Kappas were calculated to determine the reliability of the behavior items over a two-week period. Behavior item kappas ranged from .19 to 1.00. Table 2 (see p. 19) contains the kappas for each behavior item. Items 3 (ear piercing), 5 (eyebrow plucking), 13 (did not take medications as prescribed), 18 (misused laxatives or diuretics), 30 (poked self in ear), 38 (scratched skin), and 39 (picked scabs) were not included in analyses. Although most of these items were reliable over time, they were deemed unclear. As recommended by Crocker and Algina (1986), Pearson product-moment correlations were calculated to determine the reliability of the SIQ summary scores (i.e., SIQ total, Connors 1 subtotal, Connors 2 subtotal, Connors 3 subtotal, and Connors 4 subtotal) over a two-week period. Summary score correlation coefficients ranged from .76 to .96. Table 3 (see p. 20) contains the correlation coefficients for each summary score. While the SIQ's test-retest reliability is variable at the individual item level, its stability at the summary score level is good, and the summary scores are most commonly used in analyses. Pearson product-moment correlations were calculated to determine the test-retest stability of the 8 reason categories over a two-week period. The reason category correlation coefficients ranged from .35 to .84. Table 4 (see p. 20) contains the correlation coefficients for each reason category. The test-retest reliability of reason categories is variable, but adequate as a starting point given the newness of the measure.

Traumatic Events Questionnaire

The TEQ (Vrana & Lauterbach, 1994) is an 11-item, self-report measure of adulthood and childhood trauma. For each item, participants are asked to indicate whether they have experienced a specific traumatic event, and if so, how many times. Serious accidents, natural disasters, violent crime, childhood abuse, rape, and physically

abusive relationships are among the traumas included. Two items assess whether participants have experienced other kinds of traumatic events not included in the TEQ or whether they have experienced a traumatic event that they cannot name or report. Participants who indicate that they have experienced a trauma are asked to answer questions about each event, including extent of injuries sustained, perceived life threat at the time, and how traumatic the event was for them then and now. Responses to the TEQ can be analyzed individually according to trauma type or can be summed over all trauma types to yield a total score (i.e., TEQ total). The TEQ, especially the total score ($r = .91$), has been shown to have good test-retest reliability (Lauterbach & Vrana, 1996).

Trauma Symptom Checklist - 40

The TSC-40 (Briere & Runtz, 1989) is a 40-item, self-report measure of symptomatology related to childhood or adult traumatic experiences. Participants rate each test item on a 4-point scale, indicating how much each symptom (e.g., "nightmares" or "feeling that things are 'unreal'") has bothered them over the past two months. It consists of six subscales (i.e., Anxiety, Depression, Dissociation, Sexual Abuse Trauma Index, Sexual Problems, and Sleep Disturbance) and a total score. Estimates of the full scale reliability ($\alpha = .91 - .92$) are higher than those for the subscales (Norris & Riad, 1997), so only the total score was used in this study. The predictive validity of the TSC-40 has been well established in numerous studies (e.g., Gold, Milan, Mayall, & Johnson, 1994; Russ, Shearin, Clarkin, Harrison, Hull, 1993).

Results

Self-Injurious Behaviors and Trauma

The results of the SIQ were categorized in two ways. The SIQ total score was calculated by adding together all of the types of self-injury reported by each subject. SIQ scores were further broken down into Connors' categories, yielding separate totals for

body alterations, indirect self-harm, failure to care for self, and overt self-injury. Table 5 (see p. 21) shows the behaviors that constitute each of Connors' categories and the prevalence of each behavior. Intercorrelations of the primary measures can be found in Table 6 (see p. 22).

The SIQ total score was regressed on the TEQ total and the TSC-40 total. Trauma history and posttraumatic symptomatology accounted for 18% of the variance in the equation ($R^2 = .18$). Trauma history was a substantially important predictor of self-injury total when holding posttraumatic symptomatology constant ($\beta = .23, p < .001$). The variety of self-injurious behaviors increased as the number of traumatic events increased. A significant effect was also found for posttraumatic symptomatology when holding trauma history constant ($\beta = .31, p < .001$). The variety of self-injurious behaviors increased as current posttraumatic symptomatology increased.

In a series of multiple regressions, the total for each Connors subtype was regressed on the TEQ total and the TSC-40 total. For body alterations, trauma history and posttraumatic symptomatology accounted for 6% of the variance in the equation ($R^2 = .06$). Posttraumatic symptomatology was a significant predictor of body alterations when holding trauma history constant ($\beta = .24, p < .001$). The total number of body alteration behaviors increased as posttraumatic symptomatology increased. Trauma history was not a significant predictor of body alterations ($p > .05$).

For indirect self-injury, trauma history and posttraumatic symptomatology accounted for 15% of the variance in the equation ($R^2 = .15$). Trauma history ($\beta = .15, p < .05$) and posttraumatic symptomatology ($\beta = .32, p < .001$) were significant predictors of indirect self-injury total when holding each other constant. The number of indirect self-injurious behaviors increased as trauma history and posttraumatic symptomatology increased.

For failure to care for self behaviors, trauma history and posttraumatic symptomatology accounted for 14% of the variance in the equation ($R^2 = .14$). Trauma

history ($\beta = .25, p < .001$) and posttraumatic symptomatology ($\beta = .14, p < .05$) were significant predictors of failure to care for self when holding each other constant. The number of these behaviors increased as trauma history and posttraumatic symptomatology increased.

Finally, for overt self-injury, trauma history and posttraumatic symptomatology accounted for 9% of the variance in the equation ($R^2 = .09$). Trauma history ($\beta = .22, p < .001$) and posttraumatic symptomatology ($\beta = .16, p < .05$) were significant predictors of overt self-injury total when holding each other constant. The number of overt self-injurious behaviors increased as trauma history and posttraumatic symptomatology increased.

Reasons for Self-Injurious Behavior

The 29 reasons for engaging in self-injury were categorized in two ways. To calculate the proportion that each reason category was endorsed, the reasons were summed over all self-injurious behaviors and divided by the total number of behaviors reported and the number of reason items in the specific category, yielding 8 total reason categories (i.e., regulation of feelings, regulation of real-ness, safety, communication with self, communication with others, fun/rush/pleasure, social influence, and regulation of bodily sensations). For the second method of categorization, the reason categories were broken down further for each Connors subtype of self-injury to specify which reasons participants indicated for engaging in those specific categories of behavior.

In a series of bivariate regressions, SIQ total was regressed on each of the 8 total reason categories. Regulation of real-ness ($\beta = .29, p < .001$), communication with self ($\beta = .22, p < .01$), communication with others ($\beta = .27, p < .001$), fun/rush/pleasure ($\beta = .17, p < .05$), social influence ($\beta = .25, p < .001$), and regulation of bodily sensations ($\beta = .14, p < .05$) were significant predictors of self-injury total.

In a series of bivariate regressions, each Connors subtype was regressed on the 8 reason categories. For body alterations, only fun/rush/pleasure was a significant predictor ($\beta = .27, p < .05$). For indirect self-harm, regulation of real-ness ($\beta = .26, p < .001$), safety ($\beta = .19, p < .01$), communication with self ($\beta = .22, p < .001$), and communication with others ($\beta = .24, p < .001$) were significant predictors. For failure to care for self, only communication with self ($\beta = .17, p < .05$) and communication with others ($\beta = .17, p < .05$) were significant predictors. For overt self-injury, regulation of feelings ($\beta = .19, p < .05$), regulation of real-ness ($\beta = .27, p < .001$), safety ($\beta = .17, p < .05$), communication with self ($\beta = .20, p < .05$), and social influence ($\beta = .34, p < .001$) were significant predictors.

Discussion

The rates of self-injurious behaviors in college students who participated in this study were alarmingly high. The results suggested that both indirect and overt self-injury were more common than had been expected. A surprising 3.7% (cosmetic surgery) to 17.2% (body piercing) of participants reported having engaged in body alterations. In the category of indirect self-harm, 5.7% (used illegal drugs other than marijuana regularly) to 66.1% (drank alcohol until vomited/passed out) reported some form of substance abuse behavior and 10.7% (gained a large amount of weight quickly) to 31% (fasted for a day or more) reported some form of eating disordered behavior. Failures to care for self were especially high, ranging from 22.5% (avoided doctor even though very sick or injured) to 59.8% (engaged in unprotected sex). The frequency of overt self-injurious behaviors was the biggest surprise. The more disconcerting overt self-injury frequencies include: 9.4% of participants reported having cut or gouged their body, 9.0% of participants reported having banged their head repeatedly, 7.4% reported having bitten themselves, and 7.0% reported having burned themselves. These frequencies indicate that self-injury in all its forms is not limited to clinical populations.

As hypothesized, variety of self-injurious behaviors increased as extent of traumatic history and current posttraumatic symptomatology increased. People who engaged in more forms of self-injury had experienced more traumatic experiences and reported more posttraumatic symptoms. This is the case across the specific categories of self-injury (marginally for body alterations) suggested by Connors (1996) as well. People who reported having engaged in more body alterations (marginally), indirect self-harm, failures to care for self, and overt self-injury also reported more traumatic experiences and posttraumatic symptoms.

As expected, reasons typically identified by clinical populations for engaging in self-injurious behaviors were also seen in this non-clinical sample. People who engaged in a greater variety of self-injurious behaviors more often reported having done those behaviors to regulate their sense of real-ness, to communicate with themselves and others, for enjoyment, because of others' influence, and to regulate bodily sensations. These findings suggest that self-injurious behaviors serve a wide range of functions in non-clinical populations.

The relations between reasons reported and specific categories of self-injury were especially interesting. People who reported having engaged in more body alterations more often reported doing so for fun, the "rush", or pleasure. Unfortunately, the wording of the reasons makes it difficult to determine what type of pleasure these individuals derived from body alterations. Clearly, there is a difference between a person who does body piercing "just for fun" and the person who does it for physical pleasure or the adrenaline rush. The wording of these reasons must be reworked to allow for the determination of these differences.

Indirect self-harm behaviors were associated with a number of important reasons. People who reported having engaged in more indirectly harmful behaviors (e.g., substance abuse, eating disordered behaviors) more often reported doing so to regulate their sense of real-ness, to feel safe, and to communicate with themselves and others. While these

reasons are multi-faceted and require more careful wording to determine the exact functions involved, the associations between these reasons and indirect self-harm indicate that a significant proportion of undergraduate men and women may use substances and engage in eating disordered behaviors for more pathological reasons than adolescent experimentation.

For failures to care for self, people who reported more of these behaviors more often reported doing them to communicate with themselves and others. This finding indicates that undergraduates engage in behaviors like drunk driving and unprotected sex to express anger at themselves and others, to punish themselves, and to get help from others. This suggests that failures to care for self are not simply reckless behaviors for some people, but reflect an attempt to communicate their feelings about themselves and others.

Overt self-injurious behaviors were associated with a wide variety of reasons. People who reported more of these behaviors more often reported doing them to regulate their feelings and sense of real-ness, to feel safe, to communicate with themselves, and because of others' influence. These findings parallel those from studies of clinical populations of trauma survivors who report cutting or burning themselves in order to distract from painful feelings, to soothe themselves, or to punish themselves. The importance of others' influence provides support for the idea that overt self-injury may be socially contagious as has been suggested researchers and clinicians (e.g., Suyemoto & MacDonald, 1995). Conspicuously absent from this group of significant reasons is communication with others. Self-injurious behaviors like cutting and burning have historically been conceptualized as manipulative gestures designed to secure help from others and to avoid abandonment (Himber, 1994). The findings from this study demonstrate that these reasons are not important explanations of overt self-injury in this non-clinical population. The reasons for engaging in overt self-injury and less severe forms of self-harm are complicated. These preliminary findings suggest that non-clinical

samples do engage in self-injury for multiple purposes, including those reported by clinical populations. Further research is needed to clarify the functions served by self-injury.

This study raises many more questions than it answers, such as the issue of causality. It is not known whether the experience of traumatic events leads to self-injury or whether students who engage in self-injury are more prone to suffer trauma (perhaps as a function of their risk-taking behavior). This study is also limited by the newness of the primary dependent measure. While the SIQ has good face and predictive validity and is theoretically derived, its psychometric properties have not been well established.

Additional analyses of the measure's reliability and construct validity are needed. Despite these and other limitations, this first study sheds some light on the relations between self-injury and trauma in college students.

Table 1. Categories of reasons.

Regulation of feelings

- To distract from painful feelings, thoughts, or memories
- To get rid of feelings, thoughts, or memories
- To deal with physical pain instead of mental pain
- To deal with feelings about sex, closeness, or pain
- To control or manage feelings
- To soothe oneself
- To reduce tension or anxiety

Regulation of real-ness

- To see blood or feel pain
- To regain a sense of reality or being alive
- To regain control over oneself

Safety

- Instead of suicide
- To achieve a sense of peace
- To feel safe

Communication with self

- To communicate with parts of myself
- To express anger or frustration at myself
- To punish myself for something

Communication with others

- To show pain inside
- To communicate with someone else
- To express anger or frustration at someone else
- To punish someone else
- To get a reaction from someone
- To get help or care from someone

Fun / Rush / Pleasure

- For fun or the "rush"
- For pleasure

Social influence

- Friends or family did it
- Was taught to do it

Regulation of bodily sensations

- Liked the way my body felt/looked
- To make my body feel different afterward

Table 2. Test-retest kappas of SIQ behavior items over a 2-week period.

Behavior	<u>κ</u>	Behavior	<u>κ</u>
Cosmetic surgery	.85	Drove drunk	.74
Tattoos	.95	Avoided doctor despite illness or injury	.48
Ear piercing	.80	Spent time with dangerous people	.52
Body piercing	1.00	Physical fight	.73
Eyebrow plucking	.86	Pinched body	.36
Drank till vomited/passed out	.76	Poked self in ear	.19
Drank till drunk once a week	.73	Cut or gouged body	.77
Drank till drunk twice a week	.84	Burned self	.86
Smoked pot weekly/monthly	.80	Banged head	.44
Smoked pot daily	.88	Hit or slapped self	.57
Tried other illegal drugs	.78	Painful sex	.39
Used other illegals regularly	.85	Choked self	--
Used meds not as prescribed	.55	Inserted dangerous objects into body	--
Abused OTC drugs/prescriptions	.40	Scratched skin	.43
Purged	.76	Picked scabs	.53
Binged	.80	Pulled hair	.85
Fasted for a day	.63	Unnecessary douches/enemas	--
Abused laxatives or diuretics	.74	Picked nail/cuticles till they bled	.53
Lost large amount of weight	.63	Ate toxic/dangerous objects	--
Gained large amount of weight	.44	Bit self	.58
Exercised despite illness or injury	.69	Pulled out teeth/eyelashes	.45
Smoked cigarettes regularly	.91		
Drove recklessly	.73		

Note. Dashes indicate that kappa could not be calculated.

Table 3. Test-retest correlation coefficients of SIQ summary scores over a 2-week period.

SIQ Summary Score	<u>r</u>
SIQ total score	.88*
Connors 1 subtotal (Body alterations)	.96*
Connors 2 subtotal (Indirect self-harm)	.94*
Connors 3 subtotal (Failure to care for self)	.76*
Connors 4 subtotal (Overt self-injury)	.78*

* $p < .001$, two-tailed.

Table 4. Test-retest correlation coefficients of SIQ reason categories over a 2-week period.

Reason	<u>r</u>
Regulation of feelings	.71**
Regulation of real-ness	.84**
Safety	.35*
Communication with self	.78**
Communication with others	.57**
Fun/Rush/Pleasure	.67**
Influence of others	.60**
Regulation of bodily sensations	.77**

* $p < .01$. ** $p < .001$.

Table 5. Prevalence of self-injurious behaviors according to Connors subtype.

Body alterations

3.7% Cosmetic surgery
16.4% Tattoos
17.2% Body piercing

Indirect self-harm

66.1% Drank till vomited/passed out
46.7% Drunk once a week
28.3% Drunk twice a week
45.1% Marijuana weekly or monthly
18.5% Marijuana daily
25% Tried other illegal drugs
5.7% Used other illegals regularly
11.9% Abused OTC drugs or
prescriptions
15.6% Thrown up after large amounts
of food
25.4% Binged
31% Fasted for a day
17% Lost large amount of weight
10.7% Gained large amount of weight
37.7% Exercised despite illness or injury
35.7% Smoked cigarettes regularly

Failure to care for self

41.4% Drove at reckless speeds
38.5% Drove drunk
22.5% Avoided doctor despite illness or injury
30.3% Spent time with dangerous people
24.6% Physical fight
59.8% Unprotected sex

Overt self-injury

22.5% Pinched body
9.4% Cut or gouged body
7.0% Burned body
9.0% Banged head
12.3% Hit or slapped self
6.6% Painful sex
0.4% Choked self
1.2% Inserted dangerous
objects into body
9.0% Pulled hair
0.4% Unnecessary
douches/enemas
30.3% Picked nail/cuticles
till they bled
0.4% Ate toxic/dangerous
objects
7.4% Bit self
7.8% Pulled out teeth or
eyelashes

Table 6. Intercorrelations of primary variables.

Variables	Variables						
	SIQ	Connor1	Connor2	Connor3	Connor4	TEQ	TSC-40
SIQ	-	.43**	.89**	.75**	.59**	.31**	.36**
Connor1	.43**	-	.36**	.21*	.10	-.04	.22*
Connor2	.89**	.36**	-	.51**	.30**	.23**	.36**
Connor3	.75**	.21*	.51**	-	.33**	.29**	.20*
Connor4	.59**	.10	.30**	.33**	-	.26**	.21*
TEQ	.31**	-.04	.23**	.29**	.26**	-	.23**
TSC-40	.36**	.22*	.36**	.20*	.21*	.23**	-

Note. SIQ = SIQ total, Connor1 = Connors 1 subtotal (body alterations), Connor2 = Connors 2 subtotal (indirect self-harm), Connor3 = Connors 3 subtotal (failure to care for self), Connor4 = Connors 4 subtotal (overt self-injury), TEQ = TEQ total, TSC-40 = TSC-40 total.

* $p < .01$. ** $p < .001$. All others = NS.

CHAPTER 2

STUDY 2

Study 2 is a replication and extension of Study 1. Self-injury in a college sample was again investigated to determine the rate and types of self-harm, its link to traumatic events, and its functions in a non-clinical, young adult population. Undergraduate men and women were asked about their trauma history, current posttraumatic symptomatology, and history of self-injury.

A replication of Study 1 was needed to confirm that the alarmingly high numbers found in that study were not merely an artifact of sample specific variability or measurement error. To clarify these issues, the SIQ was revised for Study 2. SIQ items that were deemed unclear were removed or reworked. New behaviors and reasons were added to create a more complete list of each. Test-retest reliability of the revised version of the SIQ was assessed.

As in Study 1, it was hypothesized that involvement in self-injurious behaviors would increase as extent of traumatic history and posttraumatic symptomatology increased and that these relationships would be seen across the broad range of self-injurious behaviors. It was further expected that self-injury would be more extensive in students who more often reported engaging in the behaviors for purposes typically identified by clinical trauma populations.

Study 2 expanded upon the first study by asking participants to quantify their involvement in self-injurious behaviors (instead of simply indicating whether or not they had ever done them). It was hypothesized that more frequent involvement in various self-injurious behaviors would be associated with more extensive trauma history, higher current posttraumatic symptomatology, and more of the reasons typically identified by clinical populations.

Method

Operational Definition

As in Study 1, self-injury was defined as behavior that indirectly or directly causes psychological or physical harm to the individual. For this study, Connors' (1996) four categories of self-injury were not examined separately. Instead, those behaviors that were previously characterized as body alterations, indirect self-harm, and failures to care for self were grouped into an indirect self-injury category. This change was made because the body alterations category consists of only 3 behaviors and the failure to care for self category is not significantly different conceptually from indirect self-harm.

Participants

A total of 214 undergraduate men ($n = 52$) and women ($n = 162$) were recruited from undergraduate psychology courses at a large northeastern university. Recruitment was done in classrooms and through a central recruitment desk, where all psychology studies are advertised. The study was advertised as a project on "risky behaviors in college students". Respondents received course credit for their participation. As in Study 1, the mean age of participants was 21. For year in school, 13.6% of participants indicated that they were first-year students, 18.2% were sophomores, 31.8% were juniors, 32.2% were seniors, and 4.2% were non-traditional students (e.g., continuing education students).

The vast majority (76.6%) of the sample self-identified as European-American; 2.8% identified as African-American, 7.0% identified as Asian-American, 5.1% identified as Latino/a, and 7.9% indicated another ethnicity. For religious preference, 44.9% of participants self-identified as Catholic, 10.9% identified as Jewish, 1.9% identified as Muslim, 9.8% identified as Protestant, 11.2% indicated another religion, and 20.1% indicated that they had no religious preference. For sexual identity, 2.3% of participants identified as bisexual, 95.8% identified as straight, and 0.5% indicated that they were

uncertain about their sexual identity. No participants identified as gay, lesbian, transgendered, or transsexual, and 0.9% indicated another sexual identity.

Socioeconomic Status

Socioeconomic status (SES) was determined as a function of parents' education level and total family income. In terms of father's education level, 5.7% of participants' fathers had completed some high school, 22.4% were high school or trade school graduates, 17.3% had completed some college, 23.4% were college graduates, and 29.9% had completed some graduate training or had graduate degrees. For mother's education level, 7.5% of participants' mothers had completed some high school, 29.0% were high school or trade school graduates, 20.1% had completed some college, 22.4% were college graduates, and 19.6% had completed some graduate training or had graduate degrees. For total family income, 4.2% of participants reported an income of \$15,000 or less, 12.1% reported \$16,000 to 30,000, 23.8% reported \$31,000 to 50,000, 38.8% reported \$51,000 to 100,000, 17.8% reported over \$100,000.

Psychiatric History

Participants' history of psychological treatment was determined as a function of personal history of therapy, psychiatric medication use, and psychiatric hospitalization. Nearly half of participants (49.5%) indicated having seen a therapist or other mental health professional, 12.6% reported having taken psychiatric medication, and 2.8% indicated a history of psychiatric hospitalization.

Impairment Due to Psychological Difficulties

Participants' history of impairment due to psychological distress was determined as a function of impairment in social functioning, occupational functioning, and self-care (e.g., bathing self, feeding self). For social impairment, 61.2% of participants reported

having had a time when they avoided friends or relatives due to emotional problems, and 69.2% reported having had a time when they had many more fights with friends or relatives due to emotional problems. For occupational impairment, 37.4% of participants reported having been unable to work due to emotional problems, 70.6% reported having had trouble performing at work due to emotional problems, and 45.3% reported having been unable to work around the house due to emotional problems. For impairment in self-care, 8.9% of participants reported having had a time when they were unable to take care of themselves (e.g., bathe or feed themselves) due to emotional problems.

Family Psychiatric History

Participants' family psychiatric history was assessed as a function of family history of therapy, psychiatric medication use, and psychiatric hospitalization. Over half of participants (59.8%) reported a family history of therapy for emotional problems, 41.6% reported a family history of psychiatric medication use, and 22.0% reported a family history of psychiatric hospitalization.

Procedure

Group administration of questionnaires was conducted. Having read and signed the consent form (see Appendix A), participants answered a demographics questionnaire. Next, participants completed the TSC-40 (Briere & Runtz, 1989), which examines current posttraumatic symptomatology. A revised version of the SIQ was then administered to evaluate participants' lifetime involvement in self-injury. This measure assesses the variety, frequency, and functions of self-injurious behaviors. The TEQ (Vrana & Lauterbach, 1994), which measures the respondents' exposure to traumatic events, was administered last. The last 34 participants returned two weeks later for a second session, during which time they completed the SIQ again to facilitate assessment of the SIQ's test-

retest reliability. At the end of testing, participants were given a debriefing form (see Appendix B) that more fully explained the purposes of the study.

Measures

The measures administered in Study 2 were identical to those used in Study 1 with two exceptions.

Demographics Questionnaire

The only change that was made to the demographic questions used in Study 1 was the wording of the sexual identity question (see Appendix C). In Study 1, participants were asked to select the term that best described their sexual identity (i.e., "heterosexual", "bisexual", "homosexual", or "other"). Many fewer participants than expected indicated being other than heterosexual, which led the researcher to believe that the wording of the question may have been off-putting. In accordance with the recommendations made by Battle and Powers (1998) in their study of sexual identity assessment, the sexual identity question was reworded to allow for more options and freedom in response.

Self-Injury Questionnaire

The revised version of the SIQ differs from the one used in Study 1 both in the behaviors and reasons included and in the format used (see Appendix D). Behaviors that appeared redundant, obscure, or confusing were removed. Reasons that were unclear were reworded, and those that were redundant were removed. Several behaviors and reasons were added on the basis of feedback from Study 1 participants and from additional literature. The revised reasons list includes a wide range of functions that researchers have ascribed to self-injury (i.e., regulation of feelings, communication with others, social influence, arousal/stimulation, seeing blood, self-punishment, tension reduction,

restoration of reality, avoidance of reality, power/control, protection of others, re-enactment of trauma, avoidance of suicide, and suicide attempt).

The format of the SIQ was also changed. The revised version of the SIQ used in this study asks respondents to indicate the most frequently (if ever) they have engaged on purpose in 32 different behaviors on a 7-point Likert-type scale, in which 1 = "never", 2 = "once/twice ever", 3 = "couple of times a year", 4 = "once/twice a month", 5 = "once/twice a week", 6 = "several times a week" and 7 = "daily". If participants indicate that they have engaged in a certain behavior, they are then asked to refer to a list of 30 potential reasons and to indicate all of the reasons why they have done each behavior.

Behaviors from the SIQ can be analyzed in several ways. An SIQ total score parallel to that used in Study 1 can be calculated by treating each behavior item as dichotomous (i.e., "never" = no; "once/twice ever" or more = yes) and adding together all of the types of self-injury reported by each subject. Also, an SIQ frequency score can be calculated by summing the frequency of each type of behavior. This method of calculation allows for differential weighting of behaviors depending on the frequency with which they are performed. SIQ total and frequency scores can be further broken down into the categories of indirect and overt self-injury, thereby yielding an indirect self-injury total score, an indirect self-injury frequency score, an overt self-injury total score, and an overt self-injury frequency score. In addition, the SIQ reasons can be analyzed individually or grouped according to theme into 15 reason categories (i.e., regulation of feelings, communication with others, social influence, arousal/stimulation, seeing blood, self-punishment, tension reduction, restoration of reality, avoidance of reality, power/control, protection of others, re-enactment of trauma, avoidance of suicide, suicide attempt, and fun). Reasons are expressed as a proportion that each reason is endorsed across behaviors. The specific reason items that comprise the 15 categories can be found in Table 7 (see p. 46).

The revised SIQ has good face validity, and findings from Study 2 suggest that the SIQ has good predictive validity as well. Test-retest reliability of the revised SIQ's behavior items, summary scores, and 15 reason categories was assessed. As suggested by Crocker and Algina (1986) Pearson product-moment correlations were calculated to determine the reliability of the behavior items over a two-week period. Behavior item correlation coefficients ranged from .03 to 1.00. Table 8 (see p. 47) contains the correlation coefficients for each behavior item. Next, each behavior item was converted to a dichotomous variable that signified whether the participant had ever engaged in the behavior (0 = no, 1 = yes). Kappas were calculated to determine the reliability of the behavior items converted into dichotomous scores. Dichotomous behavior item kappas ranged from .27 to 1.00. Table 9 (see p. 48) contains the kappas for each behavior item. Pearson product-moment correlations were calculated to determine the reliability of the SIQ summary scores (i.e., SIQ total, SIQ frequency, indirect self-injury total, indirect self-injury frequency, overt self-injury total, and overt self-injury frequency) over a two-week period. Summary score correlation coefficients ranged from .77 to .92. Table 10 (see p. 49) contains the correlation coefficients for each summary score. While the SIQ's test-retest reliability is variable at the individual item level, its stability at the summary score level is good, and the summary scores are most commonly used in analyses.

Finally, Pearson product-moment correlations were calculated to determine the reliability of the 15 reason categories over a two-week period. The 15 reason category correlation coefficients ranged from .24 to .99. Table 11 (see p. 49) contains the correlation coefficients for each reason category. The test-retest reliability of reason categories is variable, but adequate as a starting point given the newness of the measure.

Results

Self-Injurious Behaviors and Trauma

The SIQ total score was calculated by converting each behavior item into a dichotomous variable and adding together all of the types of self-injury reported by each subject. The SIQ frequency score was calculated by summing the frequency of each type of behavior over all items. This method of calculation allowed for differential weighting of behaviors depending on the frequency with which they were performed. SIQ total and frequency scores were further broken down into the categories of indirect and overt self-injury, thereby yielding an indirect self-injury total score, an indirect self-injury frequency score, an overt self-injury total score, and an overt self-injury frequency score. Table 12 (see p. 50) shows the behaviors that constitute the indirect and overt self-injury categories and the prevalence of each behavior. Means and standard deviations of all primary variables can be found in Table 13 (see p. 51). Intercorrelations of the primary variables can be found in Table 14 (see p. 52).

Variety of Self-Injury

The SIQ total score was regressed on the interaction of TEQ total by TSC-40 total, TEQ total, TSC-40 total, family psychiatric history, impairment history, psychiatric treatment history, gender, and SES. The above variables accounted for 28% of the variance in the equation ($R^2 = .28$). The interaction of trauma history by posttraumatic symptomatology was marginally significant ($\beta = -.12$, $p = .07$). To interpret this interaction, the posttraumatic symptomatology variable was divided at the mean into low and high posttraumatic symptomatology, and correlations of trauma history by self-injury total were conducted on each posttraumatic symptomatology group separately. In the low posttraumatic symptomatology group, trauma history and self-injury total were significantly correlated ($r = .29$, $p < .01$), but they were not correlated in the high posttraumatic symptomatology group ($r = .13$, $p > .05$). The variety of self-injury was

positively related to severity of trauma history only when posttraumatic symptomatology was relatively low.

Family psychiatric history was a significant predictor of self-injury total when holding the other variables constant ($\beta = .23, p < .001$). The variety of self-injurious behaviors increased as the extent of family psychiatric history increased. SES was also a significant predictor of self-injury total when holding the other variables constant ($\beta = .16, p < .01$). The variety of self-injurious behaviors increased as SES increased. Gender, impairment history, and psychiatric treatment history were not significant predictors of variety of self-injurious behaviors (for all β s, $p > .05$).

The same regression analysis was performed with indirect self-injury total score as the dependent variable. The independent variables accounted for 21% of the variance in the equation ($R^2 = .21$). The pattern of findings for indirect self-injury was the same as for total self-injury. The interaction of trauma history by posttraumatic symptomatology was statistically significant ($\beta = -.15, p < .05$). To interpret this interaction, the posttraumatic symptomatology variable was divided at the mean into low and high posttraumatic symptomatology, and correlations of trauma history by indirect self-injury total were conducted on each posttraumatic symptomatology group separately. In the low posttraumatic symptomatology group, trauma history and indirect self-injury total were significantly correlated ($r = .24, p < .01$), but they were not correlated in the high posttraumatic symptomatology group ($r = .05, p > .05$). The variety of indirect self-injury was positively related to severity of trauma history only when posttraumatic symptomatology was relatively low.

Family psychiatric history was a significant predictor of indirect self-injury total when holding the other variables constant ($\beta = .20, p < .01$). The variety of indirect self-injurious behaviors increased as the extent of family psychiatric history increased. SES was also a significant predictor of indirect self-injury total when holding the other variables constant ($\beta = .21, p < .01$). The variety of indirect self-injurious behaviors

increased as SES increased. Gender, impairment history, and psychiatric treatment history were not significant predictors of variety of indirect self-injury (for all β s, $p > .05$).

The same regression analysis was performed with overt self-injury total score as the dependent variable. The independent variables accounted for 23% of the variance in the equation ($R^2 = .23$). The pattern of findings for overt self-injury was different from that of indirect and total self-injury. Posttraumatic symptomatology was a statistically significant predictor of overt self-injury total when holding the other variables constant ($\beta = .21$, $p < .01$). The variety of overt self-injurious behaviors increased as posttraumatic symptomatology increased. Family psychiatric history was a significant predictor of overt self-injury total when holding the other variables constant ($\beta = .15$, $p < .05$). The variety of overt self-injurious behaviors increased as the extent of family psychiatric history increased. Impairment history was an important predictor of overt self-injury ($\beta = .16$, $p < .05$). The variety of overt self-injurious behaviors increased as history of impairment due to emotional problems increased. Gender was another significant predictor of overt self-injury ($\beta = -.27$, $p < .001$). Men reported significantly greater variety of overt self-injurious behaviors than women. Table 15 (see p. 53) contains the prevalence of each overt self-injurious behavior by gender.

Trauma history was a marginally significant predictor of SIQ total ($\beta = .12$, $p = .08$). There was a trend for the variety of overt self-injurious behaviors to increase as severity of trauma history increased. Psychiatric treatment history, SES, and the interaction of trauma history by posttraumatic symptomatology were not significant predictors of variety of overt self-injurious behaviors (for all β s, $p > .05$).

Frequency of Self-Injury

Parallel analyses were performed with self-injury frequency scores as the dependent variables. The SIQ frequency score was regressed on the interaction of TEQ total by TSC-40 total, TEQ total, TSC-40 total, family psychiatric history, impairment

history, psychiatric treatment history, gender, and SES. The pattern of findings for self-injury frequency was the same as for self-injury total. The above variables accounted for 30% of the variance in the equation ($R^2 = .30$). The interaction of trauma history by posttraumatic symptomatology was marginally significant ($\beta = -.12, p = .08$). To interpret this interaction, the posttraumatic symptomatology variable was divided at the mean into low and high posttraumatic symptomatology, and correlations of trauma history by self-injury frequency were conducted on each posttraumatic symptomatology group separately. In the low posttraumatic symptomatology group, trauma history and self-injury frequency were significantly correlated ($r = .33, p < .001$), but they were not correlated in the high posttraumatic symptomatology group ($r = .18, p > .05$). The frequency of self-injury was positively related to severity of trauma history only when posttraumatic symptomatology was relatively low.

Family psychiatric history was a significant predictor of self-injury frequency when holding the other variables constant ($\beta = .26, p < .001$). The frequency of self-injurious behaviors increased as the extent of family psychiatric history increased. SES was also a significant predictor of self-injury frequency when holding the other variables constant ($\beta = .20, p < .01$). The frequency of self-injurious behaviors increased as SES increased. Gender, impairment history, and psychiatric treatment history were not significant predictors of frequency of self-injurious behaviors (for all β s, $p > .05$).

The same regression analysis was performed with indirect self-injury frequency score as the dependent variable. The independent variables accounted for 26% of the variance in the equation ($R^2 = .26$). The pattern of findings for indirect self-injury frequency was the same as for total self-injury frequency. The interaction of trauma history by posttraumatic symptomatology was marginally significant ($\beta = -.12, p = .07$). To interpret this interaction, the posttraumatic symptomatology variable was divided at the mean into low and high posttraumatic symptomatology, and correlations of trauma history by indirect self-injury frequency score were conducted on each posttraumatic

symptomatology group separately. In the low posttraumatic symptomatology group, trauma history and indirect self-injury frequency were significantly correlated ($r = .30, p < .01$), but they were not correlated in the high posttraumatic symptomatology group ($r = .12, p > .05$). The frequency of indirect self-injury was positively related to severity of trauma history only when posttraumatic symptomatology was relatively low.

Family psychiatric history was a significant predictor of indirect self-injury frequency when holding the other variables constant ($\beta = .24, p < .001$). The frequency of indirect self-injurious behaviors increased as the extent of family psychiatric history increased. SES was also a significant predictor of indirect self-injury frequency when holding the other variables constant ($\beta = .24, p < .001$). The frequency of indirect self-injurious behaviors increased as SES increased. Gender, impairment history, and psychiatric treatment history were not significant predictors of indirect self-injury frequency (for all β s, $p > .05$).

The same regression analysis was performed with overt self-injury frequency score as the dependent variable. The independent variables accounted for 16% of the variance in the equation ($R^2 = .16$). The pattern of findings for overt self-injury frequency was different from that of indirect and total self-injury frequency, but similar to that of overt self-injury total. Trauma history was a statistically significant predictor of overt self-injury frequency when holding the other variables constant ($\beta = .18, p < .05$). The frequency of overt self-injurious behaviors increased as severity of trauma history increased. Family psychiatric history was a significant predictor of overt self-injury frequency when holding the other variables constant ($\beta = .15, p < .05$). The frequency of overt self-injurious behaviors increased as the extent of family psychiatric history increased. Gender was another significant predictor of overt self-injury frequency when holding the other variables constant ($\beta = -.14, p < .05$). Men reported significantly more frequent overt self-injurious behaviors than women.

Posttraumatic symptomatology was a marginally significant predictor of overt self-injury frequency ($\beta = .13$, $p = .08$). There was a trend for the frequency of overt self-injurious behaviors to increase as posttraumatic symptomatology increased. Impairment history, psychiatric treatment history, SES, and the interaction of trauma history by posttraumatic symptomatology were not significant predictors of overt self-injury frequency (for all β s, $p > .05$).

Reasons for Self-Injurious Behaviors

As in Study 1, the reasons indicated for engaging in self-injury were categorized in two ways. To calculate the proportion that each of the reason categories was endorsed, the reason items were summed over all self-injurious behaviors and divided by the SIQ total score and the number of reason items in the specific category, yielding 15 total reason categories (i.e., regulation of feelings, communication with others, social influence, arousal/stimulation, fun, sight of blood, self-punishment, tension reduction, avoidance of reality, restoration of reality, power/control, protection of others, re-enactment, avoidance of suicide, and suicide attempt). The reason categories were broken down further into indirect and overt self-injury, yielding 15 reason totals for both types of self-injury.

Variety of Self-Injury

In a series of bivariate regressions, SIQ total score was regressed on the 15 reason categories. Arousal/stimulation ($\beta = .18$, $p < .01$), regulation of feelings ($\beta = .25$, $p < .001$), communication with others ($\beta = .19$, $p < .01$), self-punishment ($\beta = .19$, $p < .01$), restoration of reality ($\beta = .20$, $p < .01$), power/control ($\beta = .23$, $p < .001$), re-enactment ($\beta = .20$, $p < .01$), suicide attempt ($\beta = .27$, $p < .001$), and avoidance of suicide ($\beta = .15$, $p < .05$) were significant predictors of self-injury total score.

In a series of bivariate regressions, indirect self-injury total was regressed on each of the 15 reason categories. Power/control ($\beta = .16$, $p < .05$) and re-enactment ($\beta = .16$,

$p < .05$) were the only significant predictors of indirect self-injury total score. Lastly, in a series of bivariate regressions, overt self-injury total was regressed on each of the 15 reason categories. Arousal/stimulation ($\beta = .28, p < .001$), social influence ($\beta = .20, p < .05$), restoration of reality ($\beta = .17, p < .05$), and suicide attempt ($\beta = .16, p < .05$) were significant predictors of overt self-injury total score.

Frequency of Self-Injury

Parallel analyses were performed using the self-injury frequency scores. In a series of bivariate regressions, total SIQ frequency score was regressed on each of the 15 reason categories. Arousal/stimulation ($\beta = .21, p < .01$), regulation of feelings ($\beta = .29, p < .001$), communication with others ($\beta = .19, p < .01$), self-punishment ($\beta = .17, p < .05$), restoration of reality ($\beta = .24, p < .001$), tension reduction ($\beta = .15, p < .05$), power/control ($\beta = .27, p < .001$), re-enactment ($\beta = .25, p < .001$), suicide attempt ($\beta = .28, p < .001$), avoidance of suicide ($\beta = .18, p < .01$), and avoidance of reality ($\beta = .20, p < .01$) were significant predictors of self-injury frequency score.

In a series of bivariate regressions, indirect self-injury frequency score was regressed on each of the 15 reason categories. Regulation of feelings ($\beta = .21, p < .01$), sight of blood ($\beta = .14, p < .05$), self-punishment ($\beta = .16, p < .05$), restoration of reality ($\beta = .17, p < .05$), tension reduction ($\beta = .19, p < .01$), power/control ($\beta = .20, p < .01$), re-enactment ($\beta = .21, p < .01$), avoidance of suicide ($\beta = .16, p < .05$), and avoidance of reality ($\beta = .17, p < .05$) were all significant predictors of indirect self-injury frequency. In a final series of bivariate regressions, overt self-injury frequency score was regressed on each of the 15 reason categories. Only arousal/stimulation ($\beta = .25, p < .01$) and social influence ($\beta = .23, p < .01$) were significant predictors of overt self-injury frequency.

Discussion

As in Study 1, the rates of self-injurious behaviors in this sample of college students were alarmingly high. In the category of indirect self-injury, for example, 19.7% of participants reported having tattoos, and 30.9% reported having body piercings. Within the same category, 13.5% (abused prescriptions or over-the-counter drugs) to 78.5% (drank alcohol until vomited or passed out) of participants reported substance abuse behaviors and 7.4% (abused laxative, enemas, or diuretics) to 27.5% (binged) of participants reported eating disordered behaviors. Other indirect self-injury behaviors, such as avoiding medical care despite a serious illness or injury (18.2%) and smoking cigarettes (67.8%) were also common. As in Study 1, the frequency of overt self-injurious behaviors was especially alarming. For example, 3.3% of participants reported having burned themselves, 7.9% reported having cut or gouged themselves, 9.8% reported having bitten themselves, 15.0% reported having banged their head repeatedly, and 42.1% reported having punched walls or other objects. These frequencies replicate those from Study 1 and indicate that self-injurious behaviors, both indirect and overt, are not limited to clinical populations.

Self-Injurious Behaviors and Trauma

As hypothesized, a significant relationship between variety of self-injurious behaviors, trauma history, and posttraumatic symptomatology was found. The nature of this relationship, however, appears more complex than originally expected. In people experiencing a relatively low level of posttraumatic symptomatology, more extensive self-injury is associated with a more severe trauma history. However, there is no systematic relation between self-injury and trauma history in people experiencing relatively high levels of posttraumatic symptomatology.

This same pattern of findings is seen in the variety of indirect self-injurious behaviors. In people experiencing a relatively low level of posttraumatic symptomatology,

more extensive indirect self-injury is associated with a more severe trauma history. However, in people experiencing relatively high levels of current posttraumatic symptomatology, there is no significant relation between variety of indirect self-injury and trauma history.

The association between posttraumatic symptomatology and trauma history is different when predicting variety of overt self-injurious behaviors. People who engage in more overt self-injurious behaviors have experienced more traumatic experiences and report more posttraumatic symptomatology than those who report fewer overt behaviors. No interaction between trauma history and posttraumatic symptomatology is seen.

The findings on frequency of self-injury parallel those on variety of self-injury. As expected, a significant relationship between total self-injury frequency, trauma history, and posttraumatic symptomatology was found. As with the variety of total self-injury, more frequent self-injury in general is associated with a more severe trauma history in people experiencing a relatively low level of posttraumatic symptomatology. However, there is no significant association between total self-injury frequency and trauma history in people experiencing relatively high levels of current posttraumatic symptomatology. This same pattern is found with indirect self-injury frequency. In people experiencing a relatively low level of posttraumatic symptomatology, more frequent indirect self-injury is associated with a more severe trauma history, which is not seen in people experiencing relatively high levels of current posttraumatic symptomatology.

As seen with the variety of overt self-injury, the relation between posttraumatic symptomatology and trauma history appears to be different when predicting overt self-injury frequency. People who report more frequent overt self-injurious behaviors have experienced more traumatic experiences and report more posttraumatic symptomatology. No interaction between trauma history and posttraumatic symptomatology is apparent.

The implications of these findings are not clear. Given that there are more indirect self-injury items than overt self-injury items in the SIQ and that indirect self-injury is more

common than overt self-injury, the self-injury total is likely not that different conceptually from indirect self-injury total. This position is supported by the consistency between total self-injury findings and indirect self-injury findings across variety and frequency. It seems reasonable to conclude then that the different patterns of results seen in total self-injury and indirect self-injury versus overt self-injury are likely due to qualitative differences between indirect self-injury and overt self-injury. In overt self-injury, both trauma history and posttraumatic symptomatology are significantly associated with variety and frequency of overt self-injury. However, in indirect self-injury, trauma history is significantly related to variety and frequency of indirect self-injury only when posttraumatic symptomatology is low. It is likely that when posttraumatic symptomatology is high, other variables not included in this study (e.g., general psychological distress, personality variables, or coping strategies) better account for variety and frequency of indirect self-injury. Unlike overt self-injurious behaviors, behaviors categorized here as indirect self-injurious behaviors are not necessarily primarily self-injurious. People may abuse substances, drive recklessly, or engage in unprotected sex for reasons other than indirect self-injury. The variables that differentiate those people who engage in these behaviors for purposes of indirect self-injury versus sensation-seeking or experimentation need to be identified. It may be that the purposes that these behaviors serve (i.e., self-injury versus experimentation or other functions) are more variable in individuals experiencing high posttraumatic symptomatology, accounting for the interaction effect. These hypotheses will need to be explored and confirmed in future research.

Certain demographic variables also appear to play an important role in self-injury. Family psychiatric history was positively associated with variety and frequency of total self-injury, indirect self-injury, and overt self-injury. People with a more extensive family history of psychiatric treatment reported a greater variety of indirect self-injury, overt self-injury, and self-injury in general. Interestingly, personal history of psychiatric treatment was not associated with more extensive self-injury of any kind, which supports the

hypothesis that self-injury is an important phenomenon in non-clinical populations as well as clinical populations. The implications of the findings on family psychiatric history are not clear. Perhaps family psychiatric history is related to a more chaotic home environment, which in turn is associated with more extensive self-injury. Some researchers (e.g., Pattison & Kahan, 1983) have found evidence of increased family disruption in self-injurious individuals. The variables included in this study do not allow for further exploration of this possibility. Future research is needed to confirm and to clarify the link between family psychiatric history and self-injury.

SES was another demographic variable that was significantly related to variety and frequency of indirect self-injury and self-injury in general. People in higher SES groups report more indirect self-injurious behaviors and self-injury in general. There was no systematic relationship seen between SES and overt self-injury. The positive relationship between SES and indirect self-injury seen in this study mirrors the consistent finding of the link between higher SES and eating disorders (e.g., Wilson & Pike, 1993), and, in fact, eating disordered behaviors comprise a significant proportion of indirect self-injurious behaviors. It is not evident why higher SES would be related to other indirect self-injurious behaviors (e.g., reckless driving or unprotected sex). Further research is needed to elucidate the relationship between SES and indirect self-injury.

Gender was the only demographic variable that was uniquely related to variety and frequency of overt self-injurious behaviors. Counter to expectations, men in this study reported a greater variety and higher frequency of overt self-injury than women. The research literature typically finds higher rates of overt self-injury in women (e.g., Connors, 1996) or equivalent rates between men and women (e.g., Garrison et al., 1993; Pattison & Kahan, 1983) in clinical and non-clinical samples. It is unclear why men in this study reported significantly more overt self-injurious behaviors than women. Post-hoc chi square analyses of gender by each overt self-injurious behavior in Study 1 were conducted in an attempt to replicate these findings. While overt self-injury tended to be more

frequent in men than women, the differences were not statistically significant in general. Table 16 (see p. 53) contains the prevalence of each overt self-injurious behavior by gender for Study 1. The consistent trend for more prevalent overt behaviors in men than women provides provisional support for the gender difference found in Study 2, but it is not conclusive. It should be noted that somewhat different behavior items comprise the overt self-injury category in the two studies, which may account in part for the different findings. Additional research is needed to determine whether these findings are an artifact of sample specific variability or whether they reflect an actual gender difference in overt self-injury in non-clinical populations.

Reasons for Self-Injurious Behaviors

As expected, many of the reasons typically identified by clinical populations for engaging in self-injurious behaviors were also endorsed by this non-clinical sample. People who engaged in more extensive and frequent self-injury in general more often reported doing those behaviors to become aroused or stimulated, to regulate feelings, to communicate with others, to punish themselves, to regain a sense of reality, to feel powerful or in control, to re-enact important past events, to attempt suicide, to avoid suicide, to reduce tension (for frequency only), and to escape reality (for frequency only). These results support Study 1's findings that self-injurious behaviors serve a wide range of functions in non-clinical populations.

Variety and frequency of indirect self-injury were associated with reasons typically endorsed by clinical populations, including to feel powerful or in control and to re-enact traumatic events. As seen in Study 1, the reasons identified for engaging in indirect self-harm behaviors indicate that a significant proportion of college students is engaging in behaviors, such as drinking to intoxication and engaging in unprotected sex, for more complicated reasons than simple experimentation or youthful recklessness. While smoking cigarettes or reckless driving may reflect experimentation or testing the limits of

adolescent "immortality", some people do these behaviors to punish themselves, to escape reality, and for other reasons that indicate significant emotional turmoil. Seemingly benign or normative behaviors may reflect intrapsychic and interpersonal conflicts for some people. Clearly, not all such behaviors are problematic. Findings from this study suggest that people who engage in more varied and frequent indirect self-injury may be more likely to use these behaviors for emotionally charged reasons. Factors that distinguish behaviors as indirect self-injury as opposed to risk-taking or more benign functions will need to be explored in future research to facilitate the identification of individuals at risk.

As with indirect self-injury, variety and frequency of overt self-injury were positively related to certain reasons typically endorsed by clinical populations. People from this non-clinical sample reported engaging in overt self-injurious behaviors for multiple reasons, including arousal/stimulation, social influence, restoration of reality (for variety only), and suicide attempt (for variety only). As in Study 1, notably absent from the list of reasons for engaging in overt self-injury was communication with others. This finding provides additional support for the hypothesis that self-injurious behaviors like cutting and burning cannot be dismissed as simple manipulative gestures. Overt self-injury serves multiple functions. For mental health professionals, exploring the purposes of self-injury may provide a window into a client's intrapsychic and interpersonal conflicts and trauma history. Findings from this and other studies (e.g., Himber, 1994) suggest that clinicians must work with the client to determine the behavior's various functions. Useful clinical information can be gleaned from a better understanding of a client's self-injury.

Across Study 1 and Study 2, the consistent finding that social influence is an important reason for engaging in overt self-injurious behavior speaks to the possible social contagion of overt self-injury suggested by the media (e.g., Egan, 1997). Findings from this study suggest that preventative measures should be taken to educate people about the social context, functions, and consequences of self-injury in an effort to demystify the behavior and stem its contagion. Future studies focused specifically on the social

transmission of self-injury are needed. The mechanisms of social contagion of self-injury must be more fully explored to understand how best to prevent it. Additional research with larger, more diverse samples is also needed to explore and confirm the role of social contagion in self-injury.

Examination of the reasons for self-injury indicates that even seemingly benign indirect self-injurious behaviors can serve complicated functions. While body piercing or reckless driving may reflect youthful experimentation or risk-taking, these behaviors can also represent an attempt to resolve significant distress or interpersonal conflict. Overt self-injury also serves a variety of functions. At this point, however, there are few consistent patterns of association between specific reasons and self-injurious behaviors. For example, it is not clear why tension reduction and avoidance of reality would be associated with self-injury frequency but not variety. Additional research will need to be conducted to replicate and clarify these findings.

Limitations of the Study

While this study provides a number of significant findings, several limitations constrain their generalizability. As noted in Study 1, this study is limited by the newness of the SIQ. The measure has good face and predictive validity, but the SIQ's psychometric properties have not yet been well established. The large number of reasons included in the measure is useful in assessing the complex functions that self-injury serves; however, their conceptual distinctiveness is unclear. Further refinement of the list of reasons via item analysis using a larger sample is needed. The SIQ's test-retest reliability appears to be variable at the individual item level; however, only a small reliability sample was used in Study 2. Additional research is needed to confirm the measure's test-retest reliability as well. Also, the SIQ's construct validity has not been established and should be investigated in future studies. The SIQ has only been used with non-clinical samples to date. Its usefulness with other populations has yet to be determined. Additional

psychometric investigations of the SIQ are needed to clarify its validity, reliability, and relevance with different populations.

Despite having modified the sexual identity question in the demographics questionnaire in accordance with Battle and Powers' (1998) recommendations, a surprisingly small number of participants identified as other than heterosexual, making it impossible to assess the relationship between sexual identity, self-injury, and trauma. There is some evidence in the research literature (e.g., Pattison & Kahan, 1983) that self-injury may be more prevalent in non-heterosexual individuals, but this finding has not been confirmed. Future research with a more diverse sample is needed to clarify this association.

The generalizability of this study was also limited by nature of the sample being solely comprised of college students. It is not clear whether a similar pattern of findings would be seen in younger non-clinical populations, same-age non-college populations, and adult non-clinical populations. More research is also needed to examine the relationship between self-injury and trauma in clinical adolescent samples and other clinical populations.

As noted in Study 1, the issue of causality poses another difficulty in this study. From the study's design, it is impossible to conclude whether the experience of traumatic events leads to self-injury or whether people who engage in self-injury are more prone to be exposed to traumatic events. A prospective longitudinal study of these variables would be useful in addressing the direction of causality.

Study 2 replicates and extends the findings from Study 1. Despite the limitations noted above, this study provides support for the existence of self-injurious behaviors in all forms in a non-clinical undergraduate population. Both indirect and overt self-injury are prevalent in college students and serve a variety of functions, including those seen in clinical trauma populations. Self-injury ranging from body piercing and drunk driving to cutting and head banging is significantly related to traumatic events, posttraumatic

symptomatology, and various demographic variables. This study in conjunction with Study 1 serves as a starting point for further exploration of the relations between self-injury and trauma in non-clinical populations.

Table 7. Categories of reasons.

Arousal/Stimulation

For the rush of adrenaline or excitement
To become sexually aroused or stimulated

Social influence

My friends or family did it or taught me to do it

Regulation of feelings

To distract from feelings or thoughts
To deal with physical pain instead of mental pain
To distract from memories
To deal with feelings about sex or closeness
To deal with feelings of loneliness

Communication with others

To show the pain I felt inside
To get a reaction from someone
To express anger or frustration at someone else
To get help or care from someone

Self-punishment

To punish myself for something
To express anger or frustration at myself

Fun

For fun

Protection of others

To protect people who are important to me

Sight of blood

To see blood

Restoration of reality

To bring myself back to reality
To feel real or alive

Re-enactment

To re-enact or replay events from the past

Power/Control

To purify myself or part of myself
To feel powerful
To gain control over my body

Tension reduction

To achieve a feeling of peace
To reduce tension or anxiety

Avoidance of reality

To "numb out" or "space out"
To escape from reality

Avoidance of suicide

Instead of suicide or to avoid suicide

Suicide attempt

Suicide attempt

Table 8. Test-retest correlation coefficients of SIQ behavior items over a 2-week period.

Behavior	<u>r</u>	Behavior	<u>r</u>
Cosmetic surgery	--	Spent time with	
Tattoos	.97***	dangerous people	.65***
Body piercing	.80***	Physical fight	.29
Drank until		Engaged in	
vomited/passed out	.78***	unprotected sex	.69***
Used marijuana	.96***	Pinched body	.80***
Used illegal drugs		Cut/gouged body	.85***
other than	.79***	Burned self	1.00***
marijuana			
Abused prescriptions/		Banged head	.46**
OTC medications	.67***	Slapped/hit self	.96***
Purged	.87***	Punched walls or	
Binged	.92***	other objects	.41*
Fasted	.95***	Engaged in painful	
Used laxatives/		sex	.70***
enemas/diuretics	.65***	Scratched skin	.03
Exercised although	.73***	Picked	
sick/injured		scabs/nails/cuticles	.86***
Smoked cigarettes	.94***	Pulled hair	.75***
Drove recklessly	.88***	Ate toxic/sharp	
Drove while		objects	--
intoxicated	.91***	Bit self	1.00***
Avoided doctor			
although sick/hurt	.72***		

Note. Dashes indicate that correlation coefficient could not be calculated.

* $p < .05$, two-tailed. ** $p < .01$, two-tailed. *** $p < .001$, two-tailed.

Table 9. Test-retest kappas of dichotomous SIQ behavior items over a 2-week period.

Behavior	<u>κ</u>	Behavior	<u>κ</u>
Cosmetic surgery	--	Spent time with	
Tattoos	1.00	dangerous people	.47
Body piercing	.79	Physical fight	.56
Drank until		Engaged in	
vomited/passed out	.93	unprotected sex	.72
Used marijuana	.92	Pinched body	.63
Used illegal drugs		Cut/Gouged body	.65
other than marijuana	.73	Burned self	1.00
Abused prescriptions/		Banged head	.54
OTC medications	.68	Slapped/hit self	.87
Purged	.76	Punched walls or	
Binged	.79	other objects	.69
Fasted	.71	Engaged in painful	
Used laxatives/		sex	.65
enemas/diuretics	.27	Scratched skin	.27
Exercised although		Picked scabs/	
sick/injured	.74	nails/cuticles	.73
Smoked cigarettes	.75	Pulled hair	.61
Drove recklessly	.94	Ate toxic/sharp	--
Drove while		objects	
intoxicated	.94	Bit self	1.00
Avoided doctor			
although sick/hurt	.76		

Note. Dashes indicate that kappa could not be calculated.

Table 10. Test-retest correlation coefficients of SIQ summary scores over a 2-week period.

SIQ Summary Score	r
SIQ total score	.91*
SIQ frequency score	.90*
Indirect total score	.87*
Indirect frequency score	.92*
Overt total score	.90*
Overt frequency score	.77*

* $p < .001$, two-tailed.

Table 11. Test-retest correlation coefficients of SIQ reason categories over a 2-week period.

Reason	r
Fun	.82***
Arousal / Stimulation	.55*
Social influence	.48**
Regulation of feelings	.75***
Communication with others	.53**
Sight of blood	.99***
Self-punishment	.44**
Restoration of reality	.24
Tension reduction	.78***
Power / Control	.74***
Protection of others	.29
Re-enactment	--
Suicide attempt	.77***
Avoidance of suicide	.45**
Avoidance of reality	.75***

Note. Dashes indicate that correlation coefficient could not be calculated.

* $p < .05$, two-tailed. ** $p < .01$, two-tailed. *** $p < .001$, two-tailed.

Table 12. Prevalence of indirect and overt self-injurious behaviors.

Indirect Self-Injury

1.4% Cosmetic surgery
 19.7% Tattoos
 30.9% Body piercing
 78.5% Drank until vomited/
 passed out
 73.4% Used marijuana
 27.1% Used other illegal
 drugs
 13.5% Abused prescriptions/
 OTC drugs
 13.1% Purged
 27.5% Binged
 21.5% Fasted
 7.4% Used laxatives/enemas/
 diuretics
 20.1% Exercised despite
 illness/injury
 67.8% Smoked cigarettes
 44.4% Drove recklessly
 48.6% Drove while intoxicated
 18.2% Avoided doctor despite
 illness/injury
 42.1% Spent time with
 dangerous people
 38.8% Physical fight
 58.0% Unprotected sex

Overt Self-Injury

11.2% Pinched body
 7.9% Cut/Gouged body
 3.3% Burned body
 15.0% Banged head
 14.5% Slapped/hit self
 42.1% Punched walls/objects
 6.5% Painful sex
 8.9% Scratched skin
 34.5% Picked scabs/nails/
 cuticles
 8.9% Pulled hair
 0.9% Ate toxic substances/
 sharp objects
 9.8% Bit self

Table 13. Means and standard deviations of primary variables.

Variable	Mean	Standard deviation
SIQ total	8.17	4.22
SIQ frequency	17.43	11.61
Indirect total	6.52	3.31
Indirect frequency	14.39	9.76
Overt total	1.64	1.78
Overt frequency	2.99	3.76
TEQ total	3.73	4.52
TSC-40 total	23.61	16.85

Table 14. Intercorrelations of primary variables.

Variables	Variables							
	SIQ total	SIQ freq	Indirect total	Indirect freq	Overt total	Overt freq	TEQ total	TSC total
SIQ total	-	.88***	.92***	.82***	.67***	.56***	.22**	.34***
SIQ freq	.88***	-	.81***	.95***	.56***	.60***	.26***	.30***
Indirect total	.92***	.81***	-	.87***	.31***	.26***	.16*	.29***
Indirect freq	.82***	.95***	.87***	-	.33***	.33***	.21**	.26***
Overt total	.67***	.56***	.31***	.33***	-	.85***	.22**	.28***
Overt freq	.56***	.60***	.26***	.33***	.85***	-	.23**	.24***
TEQ total	.22**	.26***	.16*	.21**	.22**	.23**	-	.13
TSC-40 total	.34***	.30***	.29***	.26***	.28***	.24***	.13	-

Note. SIQ total = SIQ total score, SIQ freq = SIQ frequency score, Indirect total = Indirect self-injury total score, Indirect freq = Indirect self-injury frequency score, Overt total = Overt self-injury total score, Overt freq = Overt self-injury frequency score.

* $p < .05$. ** $p < .01$. *** $p < .001$. All others = NS

Table 15. Prevalence of overt self-injurious behaviors endorsed by gender in Study 2.

Behavior	Men	Women
Pinched body	15%	11%
Cut/Gouged body	8%	8%
Burned self	4%	3%
Banged head	29%	11%
Slapped/hit self	28%	11%
Punched walls or other objects	76%	32%
Engaged in painful sex	10%	6%
Scratched skin	4%	11%
Picked scabs/nails/cuticles	39%	34%
Pulled hair	16%	7%
Ate toxic/sharp objects	0%	1%
Bit self	14%	9%

Table 16. Prevalence of overt self-injurious behaviors endorsed by gender in Study 1.

Behavior	Men	Women
Pinched body	33%	22%
Cut/Gouged body	10%	4%
Burned self	12%	6%
Banged head	15%	7%
Slapped/hit self*	25%	9%
Engaged in painful sex	2%	8%
Scratched skin	39%	26%
Picked scabs	60%	57%
Pulled hair	14%	8%
Picked nails/cuticles	27%	31%
Ate toxic/sharp objects	0%	0.5%
Bit self	12%	6%

Note. Chi squares of gender by behavior were not statistically significant with the exception of slapped/hit self.

* $p < .01$

CHAPTER 3

CONCLUSION

In conclusion, the phenomenology of self-injury in a non-clinical undergraduate population was investigated in two studies. In Study 1, it was found that the variety of self-injurious behaviors increased as extent of trauma history and posttraumatic symptomatology increased. This was the case for self-injury in general and across the subcategories suggested by Connors (1996). Reasons typically identified by clinical populations for engaging in self-injurious behaviors were also reported by this college sample across a wide range of self-injury. These findings indicate that the link between self-injury and trauma is not limited to clinical populations as has been suggested.

Study 2 was a replication and extension of Study 1. Self-injury in a college sample was investigated to determine the frequency and variety of self-harm, its link to traumatic events, and its functions in a non-clinical college population. In tandem with the self-injury literature and findings from Study 1, alarmingly high rates of both indirect and overt self-injurious behaviors were found in this non-clinical sample of college students, suggesting that self-injury in its various forms is not exclusively a clinical phenomenon.

Significant relationships between variety and frequency of indirect and total self-injury, trauma history, and posttraumatic symptomatology were found in Study 2. In people experiencing relatively low levels of posttraumatic symptomatology, more extensive and frequent self-injury was associated with more severe trauma history. The relationship between these variables was not significant in people experiencing higher levels of posttraumatic symptomatology. Thus, posttraumatic symptomatology was found to moderate the association between trauma history and indirect self-injury. As for overt self-injury, people who engaged in more frequent and extensive overt self-injury reported more severe trauma histories and greater posttraumatic symptomatology. Reasons typically identified by clinical populations for engaging in overt self-injury were also endorsed by this non-clinical sample and were associated with both indirect and overt self-

injurious behaviors, indicating that self-injury serves a wide range of functions in non-clinical populations.

The findings from these two studies taken together serve as a starting point for further explorations of the phenomenology of self-injury in non-clinical populations and its link to traumatic events. Given that indirect self-injury, which has traditionally been conceptualized as benign risk-taking or experimentation, appears to serve more serious functions in non-clinical populations than previously thought, a better understanding of its functions and psychological sequelae will enable mental professionals to address these important issues more effectively. Also, if overt self-injury is, in fact, reaching epidemic proportions even in non-clinical populations as suggested by some (Egan, 1997), then more information is needed to understand how best to conceptualize and address the wide range of self-injury, its functions and its link to trauma in the general population.

APPENDIX A
CONSENT FORM

Consent Form

Purpose of the Study. In this study, undergraduate men and women's participation in risk-taking behaviors will be explored. Over two testing sessions, you will be asked to complete questionnaires about your involvement in risk-taking behaviors and your reasons for engaging in them. You will also be asked to complete questionnaires about important events in your life, your ways of handling difficult life events, and your current mood. The first testing session will last approximately one hour. The second will take place two weeks later and will last about 30 minutes.

Risks and Benefits. The questionnaires cover personal and potentially uncomfortable experiences that you may have had. Some people may find it emotionally distressing to answer some questions. You are free to skip questions or withdraw from the study at any time without penalty. In terms of benefits, you may find it interesting to contemplate the issues covered in the questionnaires, and you may learn something about who you are. You will also receive experimental credits for your participation. If you do not return for the second testing session you will still receive partial credit (2 credits) for your participation.

Confidentiality. All information you provide will be kept confidential and will be identified by code number only. Your name will not be placed on any sheet except this one, and this sheet will be kept separate from all the other information you provide. If you choose not to disclose any information, that decision will be honored.

I have read and understand the above. I understand that the investigators are willing to answer any questions that I may have concerning the procedure for which I am volunteering. All questions that I have at this time have been answered. I understand that my participation is voluntary and I may withdraw my consent at any time without penalty. I hereby give my consent to participate in this study.

Date

Signature of Participant

I have explained the above to the participant and have answered all questions that she or he had.

Date

Experimenter

APPENDIX B

DEBRIEFING FORM

Debriefing Form

You have just participated in a study of potentially self-harmful behaviors in undergraduate men and women. I am looking at what types of potentially self-harmful behaviors college students engage in and for what reasons. I am planning to examine whether self-harmful behaviors and their functions are related to stressful life events. The second purpose of this study is to test the reliability of one of the questionnaires, which is the reason why you were asked to complete that questionnaire a second time. I am examining whether people score consistently on that measure over time.

This study will be completed by the end of the 1999 spring semester. If you are interested in receiving the results of this study, please contact me through the Department of Psychology, Clinical Division.

Sometimes participation in this kind of a study can lead to concerns about painful events in one's life or one's own mental health. If you are feeling concerned, anxious, or depressed following this study, please contact one of the following campus agencies for help and support:

Student Mental Health	545-2337
Psychological Services Center	545-0041

Thank you very much for your participation!

Laurel Alexander
Department of Psychology
University of Massachusetts

APPENDIX C

DEMOGRAPHICS QUESTIONNAIRE

1. Gender
 - a. male
 - b. female
2. Age _____
3. Year in school
 - a. First-year
 - b. Sophomore
 - c. Junior
 - d. Senior
 - e. Other _____
4. Approximate cumulative grade point average
 - a. No grades yet (first-semester student)
 - b. Below 2.0 (C- or lower)
 - c. 2.0 - 2.9 (C/C+)
 - d. 3.0 - 3.4 (B/B+)
 - e. 3.5 - 4.0 (A/A-)
5. Combined annual family income
 - a. \$15,000 or less
 - b. \$16,000 - \$30,000
 - c. \$31,000 - \$50,000
 - d. \$51,000 - \$100,000
 - e. over \$100,000
6. Mother's highest level of education (Select one)
 - a. Some high school
 - b. High school or trade school
 - c. Some college
 - d. College graduate
 - e. Some graduate school or graduate degree
7. Father's highest level of education (Select one)
 - a. Some high school
 - b. High school or trade school
 - c. Some college
 - d. College graduate
 - e. Some graduate school or graduate degree
8. What is your racial/ethnic background? (please circle one)
 - a. African-American
 - b. Asian-American
 - c. European-American
 - d. Latino/a
 - e. Native American
 - f. Other (please specify) _____

9. What is your religion? (please circle one)
- a. Catholic
 - b. Jewish
 - c. Muslim
 - d. Protestant
 - e. Other (please specify) _____
 - f. No religion
10. Which term below best conveys your sexual identity? (please circle one)
- a. bisexual
 - b. gay
 - c. lesbian
 - d. straight
 - e. transgendered
 - f. transsexual
 - g. I am uncertain about my sexual identity at this point
 - h. The term I prefer is not listed above; I prefer the following: _____
11. Have you ever been arrested?
- a. yes
 - b. no
12. If you have been arrested, please indicate how many times _____
13. Have you ever been suspended or expelled from school?
- a. yes
 - b. no
14. If you have been suspended or expelled, please indicate how many times _____
15. Has anyone in your family (i.e., parents, siblings, children, grandparents, aunt/uncle) ever received counseling or therapy for an emotional or psychological problem?
- a. yes
 - b. no
 - c. not sure
16. Has anyone in your family ever received medication for an emotional or psychological problem?
- a. yes
 - b. no
 - c. not sure
17. Has anyone in your family ever been in a psychiatric hospital for an emotional or psychological problem?
- a. yes
 - b. no
 - c. not sure
18. Have you ever seen a therapist, counselor, minister, or other professional for emotional problems, your nerves, or the way you were feeling or acting?
- a. yes
 - b. no
19. Was there ever a time when you felt so troubled that you wanted to seek help but did not?
- a. yes
 - b. no

If yes, why didn't you seek help? _____

20. Have you ever taken medication for psychiatric / emotional reasons?
- a. yes
 - b. no
21. Have you ever been hospitalized for psychiatric reasons?
- a. yes
 - b. no
22. Have you ever had a time when you were unable to go to work/school or missed a lot of classes for emotional reasons (e.g., because you were feeling too down or nervous)?
- a. yes
 - b. no
23. Have you ever had a time when you were able to go to work/school, but felt that you were not able to perform as well as usual or keep up with your schoolwork for emotional reasons?
- a. yes
 - b. no
24. Have you ever had a time when you were unable to do work around the house (e.g., cleaning or grocery shopping) for emotional reasons? (e.g., because you were feeling too down or nervous)
- a. yes
 - b. no
25. Have you ever had a time when you stayed away from friends or relatives for emotional reasons (e.g., because you were feeling too down or nervous)?
- a. yes
 - b. no
26. Have you ever had a time when you got into a lot more arguments or fights with friends or relatives for emotional reasons (e.g., because you were feeling down or nervous)?
- a. yes
 - b. no
27. Have you ever had a time when you were unable to take care of yourself (e.g., bathing yourself, preparing food for yourself) for emotional reasons (e.g., because you were feeling too down or nervous)?
- a. yes
 - b. no

APPENDIX D

SELF-INJURY QUESTIONNAIRE

Sometimes people engage on purpose in behaviors that affect or change their bodies. This questionnaire asks about behaviors like these that you may have engaged in and reasons why you have done them. If you have ever engaged in the behavior listed, please circle the numbers of all reasons that apply to why you have done that particular behavior.

1. Cosmetic surgery (e.g., nose job, liposuction) other than after a serious injury or accident

a. How many surgeries have you had? _____ (if none, skip to question #2)

b. On which body parts have you had cosmetic surgery? (please list all): _____

If you have ever engaged in this behavior, circle the numbers of all applicable reasons:

- | | |
|------------------------------------------------------|------------------------------------------------|
| 1. For fun | 16. To achieve a feeling of peace |
| 2. For the rush of adrenaline or excitement | 17. To reduce tension or anxiety |
| 3. My friends or family did it or taught me to do it | 18. To "numb out" or "space out" |
| 4. To distract from feelings or thoughts | 19. To escape from reality |
| 5. To deal with physical pain instead of mental pain | 20. To deal with feelings of loneliness |
| 6. To distract from memories | 21. To purify myself or a part of myself |
| 7. To show the pain I felt inside | 22. To feel powerful |
| 8. To see blood | 23. To gain control over my body |
| 9. To get a reaction from someone | 24. To become sexually aroused or stimulated |
| 10. To express anger or frustration at someone else | 25. To protect people who are important to me |
| 11. To punish myself for something | 26. To re-enact or replay events from the past |
| 12. To express anger or frustration at myself | 27. Suicide attempt |
| 13. To deal with feelings about sex or closeness | 28. Instead of suicide or to avoid suicide |
| 14. To bring myself back to reality | 29. To get help or care from someone |
| 15. To feel real or alive | 30. I do not know why |

Other reason not indicated on list: _____

2. Tattoos

a. How many tattoos do you have? _____ (if none, skip to question #3)

b. On which body parts do you have tattoos? (please list all): _____

c. Approximately how many inches across is your biggest tattoo? _____ inches

If you have ever engaged in this behavior, circle the numbers of all applicable reasons:

- | | |
|------------------------------------------------------|------------------------------------------------|
| 1. For fun | 16. To achieve a feeling of peace |
| 2. For the rush of adrenaline or excitement | 17. To reduce tension or anxiety |
| 3. My friends or family did it or taught me to do it | 18. To "numb out" or "space out" |
| 4. To distract from feelings or thoughts | 19. To escape from reality |
| 5. To deal with physical pain instead of mental pain | 20. To deal with feelings of loneliness |
| 6. To distract from memories | 21. To purify myself or a part of myself |
| 7. To show the pain I felt inside | 22. To feel powerful |
| 8. To see blood | 23. To gain control over my body |
| 9. To get a reaction from someone | 24. To become sexually aroused or stimulated |
| 10. To express anger or frustration at someone else | 25. To protect people who are important to me |
| 11. To punish myself for something | 26. To re-enact or replay events from the past |
| 12. To express anger or frustration at myself | 27. Suicide attempt |
| 13. To deal with feelings about sex or closeness | 28. Instead of suicide or to avoid suicide |
| 14. To bring myself back to reality | 29. To get help or care from someone |
| 15. To feel real or alive | 30. I do not know why |

Other reason not indicated on list: _____

3. **Body piercing (other than ears)**

- a. How many piercings do you have? _____ (if none, skip to question #4)
b. On which body parts have you been pierced? (please indicate all): _____

If you have ever engaged in this behavior, circle the numbers of all applicable reasons:

- | | |
|------------------------------------------------------|------------------------------------------------|
| 1. For fun | 16. To achieve a feeling of peace |
| 2. For the rush of adrenaline or excitement | 17. To reduce tension or anxiety |
| 3. My friends or family did it or taught me to do it | 18. To "numb out" or "space out" |
| 4. To distract from feelings or thoughts | 19. To escape from reality |
| 5. To deal with physical pain instead of mental pain | 20. To deal with feelings of loneliness |
| 6. To distract from memories | 21. To purify myself or a part of myself |
| 7. To show the pain I felt inside | 22. To feel powerful |
| 8. To see blood | 23. To gain control over my body |
| 9. To get a reaction from someone | 24. To become sexually aroused or stimulated |
| 10. To express anger or frustration at someone else | 25. To protect people who are important to me |
| 11. To punish myself for something | 26. To re-enact or replay events from the past |
| 12. To express anger or frustration at myself | 27. Suicide attempt |
| 13. To deal with feelings about sex or closeness | 28. Instead of suicide or to avoid suicide |
| 14. To bring myself back to reality | 29. To get help or care from someone |
| 15. To feel real or alive | 30. I do not know why |

Other reason not indicated on list: _____

For the remaining questions, please circle the number that indicates the most frequently (if ever) you have engaged in each behavior listed here. The number you circle should indicate the most that you have ever done this behavior even if your current behavior is different. As above, if you have ever engaged in the behavior listed, please circle the numbers of all reasons that apply to why you have done that particular behavior.

4. **Drank alcohol until vomited or passed out**

- | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|-------|--------------------|---------------------------|----------------------------|------------------------|-------------------------|-------|
| Never | Once/Twice
Ever | Couple of
Times a Year | Once /
Twice
a Month | Once / Twice
a Week | Several
Times a Week | Daily |

If you have ever engaged in this behavior, circle the numbers of all applicable reasons:

- | | |
|------------------------------------------------------|------------------------------------------------|
| 1. For fun | 16. To achieve a feeling of peace |
| 2. For the rush of adrenaline or excitement | 17. To reduce tension or anxiety |
| 3. My friends or family did it or taught me to do it | 18. To "numb out" or "space out" |
| 4. To distract from feelings or thoughts | 19. To escape from reality |
| 5. To deal with physical pain instead of mental pain | 20. To deal with feelings of loneliness |
| 6. To distract from memories | 21. To purify myself or a part of myself |
| 7. To show the pain I felt inside | 22. To feel powerful |
| 8. To see blood | 23. To gain control over my body |
| 9. To get a reaction from someone | 24. To become sexually aroused or stimulated |
| 10. To express anger or frustration at someone else | 25. To protect people who are important to me |
| 11. To punish myself for something | 26. To re-enact or replay events from the past |
| 12. To express anger or frustration at myself | 27. Suicide attempt |
| 13. To deal with feelings about sex or closeness | 28. Instead of suicide or to avoid suicide |
| 14. To bring myself back to reality | 29. To get help or care from someone |
| 15. To feel real or alive | 30. I do not know why |

Other reason not indicated on list: _____

5. Used marijuana

1	2	3	4	5	6	7
Never	Once/Twice Ever	Couple of Times a Year	Once / Twice a Month	Once / Twice a Week	Several Times a Week	Daily

If you have ever engaged in this behavior, circle the numbers of all applicable reasons:

- | | |
|------------------------------------------------------|------------------------------------------------|
| 1. For fun | 16. To achieve a feeling of peace |
| 2. For the rush of adrenaline or excitement | 17. To reduce tension or anxiety |
| 3. My friends or family did it or taught me to do it | 18. To "numb out" or "space out" |
| 4. To distract from feelings or thoughts | 19. To escape from reality |
| 5. To deal with physical pain instead of mental pain | 20. To deal with feelings of loneliness |
| 6. To distract from memories | 21. To purify myself or a part of myself |
| 7. To show the pain I felt inside | 22. To feel powerful |
| 8. To see blood | 23. To gain control over my body |
| 9. To get a reaction from someone | 24. To become sexually aroused or stimulated |
| 10. To express anger or frustration at someone else | 25. To protect people who are important to me |
| 11. To punish myself for something | 26. To re-enact or replay events from the past |
| 12. To express anger or frustration at myself | 27. Suicide attempt |
| 13. To deal with feelings about sex or closeness | 28. Instead of suicide or to avoid suicide |
| 14. To bring myself back to reality | 29. To get help or care from someone |
| 15. To feel real or alive | 30. I do not know why |

Other reason not indicated on list: _____

6. Used illegal drugs other than marijuana (e.g., cocaine, amphetamines)

1	2	3	4	5	6	7
Never	Once/Twice Ever	Couple of Times a Year	Once / Twice a Month	Once / Twice a Week	Several Times a Week	Daily

If you have ever engaged in this behavior, circle the numbers of all applicable reasons:

- | | |
|------------------------------------------------------|------------------------------------------------|
| 1. For fun | 16. To achieve a feeling of peace |
| 2. For the rush of adrenaline or excitement | 17. To reduce tension or anxiety |
| 3. My friends or family did it or taught me to do it | 18. To "numb out" or "space out" |
| 4. To distract from feelings or thoughts | 19. To escape from reality |
| 5. To deal with physical pain instead of mental pain | 20. To deal with feelings of loneliness |
| 6. To distract from memories | 21. To purify myself or a part of myself |
| 7. To show the pain I felt inside | 22. To feel powerful |
| 8. To see blood | 23. To gain control over my body |
| 9. To get a reaction from someone | 24. To become sexually aroused or stimulated |
| 10. To express anger or frustration at someone else | 25. To protect people who are important to me |
| 11. To punish myself for something | 26. To re-enact or replay events from the past |
| 12. To express anger or frustration at myself | 27. Suicide attempt |
| 13. To deal with feelings about sex or closeness | 28. Instead of suicide or to avoid suicide |
| 14. To bring myself back to reality | 29. To get help or care from someone |
| 15. To feel real or alive | 30. I do not know why |

Other reason not indicated on list: _____

7. Abused prescription or over-the-counter medications

1	2	3	4	5	6	7
Never	Once/Twice Ever	Couple of Times a Year	Once / Twice a Month	Once / Twice a Week	Several Times a Week	Daily

If you have ever engaged in this behavior, circle the numbers of all applicable reasons:

- | | |
|------------------------------------------------------|------------------------------------------------|
| 1. For fun | 16. To achieve a feeling of peace |
| 2. For the rush of adrenaline or excitement | 17. To reduce tension or anxiety |
| 3. My friends or family did it or taught me to do it | 18. To "numb out" or "space out" |
| 4. To distract from feelings or thoughts | 19. To escape from reality |
| 5. To deal with physical pain instead of mental pain | 20. To deal with feelings of loneliness |
| 6. To distract from memories | 21. To purify myself or a part of myself |
| 7. To show the pain I felt inside | 22. To feel powerful |
| 8. To see blood | 23. To gain control over my body |
| 9. To get a reaction from someone | 24. To become sexually aroused or stimulated |
| 10. To express anger or frustration at someone else | 25. To protect people who are important to me |
| 11. To punish myself for something | 26. To re-enact or replay events from the past |
| 12. To express anger or frustration at myself | 27. Suicide attempt |
| 13. To deal with feelings about sex or closeness | 28. Instead of suicide or to avoid suicide |
| 14. To bring myself back to reality | 29. To get help or care from someone |
| 15. To feel real or alive | 30. I do not know why |

Other reason not indicated on list: _____

8. Thrown up on purpose after eating large amounts of food

1	2	3	4	5	6	7
Never	Once/Twice Ever	Couple of Times a Year	Once / Twice a Month	Once / Twice a Week	Several Times a Week	Daily

If you have ever engaged in this behavior, circle the numbers of all applicable reasons:

- | | |
|------------------------------------------------------|------------------------------------------------|
| 1. For fun | 16. To achieve a feeling of peace |
| 2. For the rush of adrenaline or excitement | 17. To reduce tension or anxiety |
| 3. My friends or family did it or taught me to do it | 18. To "numb out" or "space out" |
| 4. To distract from feelings or thoughts | 19. To escape from reality |
| 5. To deal with physical pain instead of mental pain | 20. To deal with feelings of loneliness |
| 6. To distract from memories | 21. To purify myself or a part of myself |
| 7. To show the pain I felt inside | 22. To feel powerful |
| 8. To see blood | 23. To gain control over my body |
| 9. To get a reaction from someone | 24. To become sexually aroused or stimulated |
| 10. To express anger or frustration at someone else | 25. To protect people who are important to me |
| 11. To punish myself for something | 26. To re-enact or replay events from the past |
| 12. To express anger or frustration at myself | 27. Suicide attempt |
| 13. To deal with feelings about sex or closeness | 28. Instead of suicide or to avoid suicide |
| 14. To bring myself back to reality | 29. To get help or care from someone |
| 15. To feel real or alive | 30. I do not know why |

Other reason not indicated on list: _____

9. Binged on food (ate an excessively large amount) on purpose

1	2	3	4	5	6	7
Never	Once/Twice Ever	Couple of Times a Year	Once / Twice a Month	Once / Twice a Week	Several Times a Week	Daily

If you have ever engaged in this behavior, circle the numbers of all applicable reasons:

- | | |
|------------------------------------------------------|------------------------------------------------|
| 1. For fun | 16. To achieve a feeling of peace |
| 2. For the rush of adrenaline or excitement | 17. To reduce tension or anxiety |
| 3. My friends or family did it or taught me to do it | 18. To "numb out" or "space out" |
| 4. To distract from feelings or thoughts | 19. To escape from reality |
| 5. To deal with physical pain instead of mental pain | 20. To deal with feelings of loneliness |
| 6. To distract from memories | 21. To purify myself or a part of myself |
| 7. To show the pain I felt inside | 22. To feel powerful |
| 8. To see blood | 23. To gain control over my body |
| 9. To get a reaction from someone | 24. To become sexually aroused or stimulated |
| 10. To express anger or frustration at someone else | 25. To protect people who are important to me |
| 11. To punish myself for something | 26. To re-enact or replay events from the past |
| 12. To express anger or frustration at myself | 27. Suicide attempt |
| 13. To deal with feelings about sex or closeness | 28. Instead of suicide or to avoid suicide |
| 14. To bring myself back to reality | 29. To get help or care from someone |
| 15. To feel real or alive | 30. I do not know why |

Other reason not indicated on list: _____

10. Fasted for a day or more on purpose (not for religious reasons)

1	2	3	4	5	6	7
Never	Once/Twice Ever	Couple of Times a Year	Once / Twice a Month	Once / Twice a Week	Several Times a Week	Daily

If you have ever engaged in this behavior, circle the numbers of all applicable reasons:

- | | |
|------------------------------------------------------|------------------------------------------------|
| 1. For fun | 16. To achieve a feeling of peace |
| 2. For the rush of adrenaline or excitement | 17. To reduce tension or anxiety |
| 3. My friends or family did it or taught me to do it | 18. To "numb out" or "space out" |
| 4. To distract from feelings or thoughts | 19. To escape from reality |
| 5. To deal with physical pain instead of mental pain | 20. To deal with feelings of loneliness |
| 6. To distract from memories | 21. To purify myself or a part of myself |
| 7. To show the pain I felt inside | 22. To feel powerful |
| 8. To see blood | 23. To gain control over my body |
| 9. To get a reaction from someone | 24. To become sexually aroused or stimulated |
| 10. To express anger or frustration at someone else | 25. To protect people who are important to me |
| 11. To punish myself for something | 26. To re-enact or replay events from the past |
| 12. To express anger or frustration at myself | 27. Suicide attempt |
| 13. To deal with feelings about sex or closeness | 28. Instead of suicide or to avoid suicide |
| 14. To bring myself back to reality | 29. To get help or care from someone |
| 15. To feel real or alive | 30. I do not know why |

Other reason not indicated on list: _____

11. Used laxatives, enemas, or diuretics for other than medical reasons

1	2	3	4	5	6	7
Never	Once/Twice Ever	Couple of Times a Year	Once / Twice a Month	Once / Twice a Week	Several Times a Week	Daily

If you have ever engaged in this behavior, circle the numbers of all applicable reasons:

- | | |
|------------------------------------------------------|------------------------------------------------|
| 1. For fun | 16. To achieve a feeling of peace |
| 2. For the rush of adrenaline or excitement | 17. To reduce tension or anxiety |
| 3. My friends or family did it or taught me to do it | 18. To "numb out" or "space out" |
| 4. To distract from feelings or thoughts | 19. To escape from reality |
| 5. To deal with physical pain instead of mental pain | 20. To deal with feelings of loneliness |
| 6. To distract from memories | 21. To purify myself or a part of myself |
| 7. To show the pain I felt inside | 22. To feel powerful |
| 8. To see blood | 23. To gain control over my body |
| 9. To get a reaction from someone | 24. To become sexually aroused or stimulated |
| 10. To express anger or frustration at someone else | 25. To protect people who are important to me |
| 11. To punish myself for something | 26. To re-enact or replay events from the past |
| 12. To express anger or frustration at myself | 27. Suicide attempt |
| 13. To deal with feelings about sex or closeness | 28. Instead of suicide or to avoid suicide |
| 14. To bring myself back to reality | 29. To get help or care from someone |
| 15. To feel real or alive | 30. I do not know why |

Other reason not indicated on list: _____

12. Exercised even though you were very sick or seriously injured

1	2	3	4	5	6	7
Never	Once/Twice Ever	Couple of Times a Year	Once / Twice a Month	Once / Twice a Week	Several Times a Week	Daily

If you have ever engaged in this behavior, circle the numbers of all applicable reasons:

- | | |
|------------------------------------------------------|------------------------------------------------|
| 1. For fun | 16. To achieve a feeling of peace |
| 2. For the rush of adrenaline or excitement | 17. To reduce tension or anxiety |
| 3. My friends or family did it or taught me to do it | 18. To "numb out" or "space out" |
| 4. To distract from feelings or thoughts | 19. To escape from reality |
| 5. To deal with physical pain instead of mental pain | 20. To deal with feelings of loneliness |
| 6. To distract from memories | 21. To purify myself or a part of myself |
| 7. To show the pain I felt inside | 22. To feel powerful |
| 8. To see blood | 23. To gain control over my body |
| 9. To get a reaction from someone | 24. To become sexually aroused or stimulated |
| 10. To express anger or frustration at someone else | 25. To protect people who are important to me |
| 11. To punish myself for something | 26. To re-enact or replay events from the past |
| 12. To express anger or frustration at myself | 27. Suicide attempt |
| 13. To deal with feelings about sex or closeness | 28. Instead of suicide or to avoid suicide |
| 14. To bring myself back to reality | 29. To get help or care from someone |
| 15. To feel real or alive | 30. I do not know why |

Other reason not indicated on list: _____

13. Smoked cigarettes

1	2	3	4	5	6	7
Never	Once/Twice Ever	Couple of Times a Year	Once / Twice a Month	Once / Twice a Week	Several Times a Week	Daily

If you have ever engaged in this behavior, circle the numbers of all applicable reasons:

- | | |
|------------------------------------------------------|------------------------------------------------|
| 1. For fun | 16. To achieve a feeling of peace |
| 2. For the rush of adrenaline or excitement | 17. To reduce tension or anxiety |
| 3. My friends or family did it or taught me to do it | 18. To "numb out" or "space out" |
| 4. To distract from feelings or thoughts | 19. To escape from reality |
| 5. To deal with physical pain instead of mental pain | 20. To deal with feelings of loneliness |
| 6. To distract from memories | 21. To purify myself or a part of myself |
| 7. To show the pain I felt inside | 22. To feel powerful |
| 8. To see blood | 23. To gain control over my body |
| 9. To get a reaction from someone | 24. To become sexually aroused or stimulated |
| 10. To express anger or frustration at someone else | 25. To protect people who are important to me |
| 11. To punish myself for something | 26. To re-enact or replay events from the past |
| 12. To express anger or frustration at myself | 27. Suicide attempt |
| 13. To deal with feelings about sex or closeness | 28. Instead of suicide or to avoid suicide |
| 14. To bring myself back to reality | 29. To get help or care from someone |
| 15. To feel real or alive | 30. I do not know why |

Other reason not indicated on list: _____

14. Drove recklessly

1	2	3	4	5	6	7
Never	Once/Twice Ever	Couple of Times a Year	Once / Twice a Month	Once / Twice a Week	Several Times a Week	Daily

If you have ever engaged in this behavior, circle the numbers of all applicable reasons:

- | | |
|------------------------------------------------------|------------------------------------------------|
| 1. For fun | 16. To achieve a feeling of peace |
| 2. For the rush of adrenaline or excitement | 17. To reduce tension or anxiety |
| 3. My friends or family did it or taught me to do it | 18. To "numb out" or "space out" |
| 4. To distract from feelings or thoughts | 19. To escape from reality |
| 5. To deal with physical pain instead of mental pain | 20. To deal with feelings of loneliness |
| 6. To distract from memories | 21. To purify myself or a part of myself |
| 7. To show the pain I felt inside | 22. To feel powerful |
| 8. To see blood | 23. To gain control over my body |
| 9. To get a reaction from someone | 24. To become sexually aroused or stimulated |
| 10. To express anger or frustration at someone else | 25. To protect people who are important to me |
| 11. To punish myself for something | 26. To re-enact or replay events from the past |
| 12. To express anger or frustration at myself | 27. Suicide attempt |
| 13. To deal with feelings about sex or closeness | 28. Instead of suicide or to avoid suicide |
| 14. To bring myself back to reality | 29. To get help or care from someone |
| 15. To feel real or alive | 30. I do not know why |

Other reason not indicated on list: _____

15. Drove while intoxicated

1	2	3	4	5	6	7
Never	Once/Twice Ever	Couple of Times a Year	Once / Twice a Month	Once / Twice a Week	Several Times a Week	Daily

If you have ever engaged in this behavior, circle the numbers of all applicable reasons:

- | | |
|------------------------------------------------------|------------------------------------------------|
| 1. For fun | 16. To achieve a feeling of peace |
| 2. For the rush of adrenaline or excitement | 17. To reduce tension or anxiety |
| 3. My friends or family did it or taught me to do it | 18. To "numb out" or "space out" |
| 4. To distract from feelings or thoughts | 19. To escape from reality |
| 5. To deal with physical pain instead of mental pain | 20. To deal with feelings of loneliness |
| 6. To distract from memories | 21. To purify myself or a part of myself |
| 7. To show the pain I felt inside | 22. To feel powerful |
| 8. To see blood | 23. To gain control over my body |
| 9. To get a reaction from someone | 24. To become sexually aroused or stimulated |
| 10. To express anger or frustration at someone else | 25. To protect people who are important to me |
| 11. To punish myself for something | 26. To re-enact or replay events from the past |
| 12. To express anger or frustration at myself | 27. Suicide attempt |
| 13. To deal with feelings about sex or closeness | 28. Instead of suicide or to avoid suicide |
| 14. To bring myself back to reality | 29. To get help or care from someone |
| 15. To feel real or alive | 30. I do not know why |

Other reason not indicated on list: _____

16. Intentionally avoided going to the doctor even though very sick or seriously injured

1	2	3	4	5	6	7
Never	Once/Twice Ever	Couple of Times a Year	Once / Twice a Month	Once / Twice a Week	Several Times a Week	Daily

If you have ever engaged in this behavior, circle the numbers of all applicable reasons:

- | | |
|------------------------------------------------------|------------------------------------------------|
| 1. For fun | 16. To achieve a feeling of peace |
| 2. For the rush of adrenaline or excitement | 17. To reduce tension or anxiety |
| 3. My friends or family did it or taught me to do it | 18. To "numb out" or "space out" |
| 4. To distract from feelings or thoughts | 19. To escape from reality |
| 5. To deal with physical pain instead of mental pain | 20. To deal with feelings of loneliness |
| 6. To distract from memories | 21. To purify myself or a part of myself |
| 7. To show the pain I felt inside | 22. To feel powerful |
| 8. To see blood | 23. To gain control over my body |
| 9. To get a reaction from someone | 24. To become sexually aroused or stimulated |
| 10. To express anger or frustration at someone else | 25. To protect people who are important to me |
| 11. To punish myself for something | 26. To re-enact or replay events from the past |
| 12. To express anger or frustration at myself | 27. Suicide attempt |
| 13. To deal with feelings about sex or closeness | 28. Instead of suicide or to avoid suicide |
| 14. To bring myself back to reality | 29. To get help or care from someone |
| 15. To feel real or alive | 30. I do not know why |

Other reason not indicated on list: _____

17. Spent time with people who were dangerous

1	2	3	4	5	6	7
Never	Once/Twice Ever	Couple of Times a Year	Once / Twice a Month	Once / Twice a Week	Several Times a Week	Daily

If you have ever engaged in this behavior, circle the numbers of all applicable reasons:

- | | |
|------------------------------------------------------|------------------------------------------------|
| 1. For fun | 16. To achieve a feeling of peace |
| 2. For the rush of adrenaline or excitement | 17. To reduce tension or anxiety |
| 3. My friends or family did it or taught me to do it | 18. To "numb out" or "space out" |
| 4. To distract from feelings or thoughts | 19. To escape from reality |
| 5. To deal with physical pain instead of mental pain | 20. To deal with feelings of loneliness |
| 6. To distract from memories | 21. To purify myself or a part of myself |
| 7. To show the pain I felt inside | 22. To feel powerful |
| 8. To see blood | 23. To gain control over my body |
| 9. To get a reaction from someone | 24. To become sexually aroused or stimulated |
| 10. To express anger or frustration at someone else | 25. To protect people who are important to me |
| 11. To punish myself for something | 26. To re-enact or replay events from the past |
| 12. To express anger or frustration at myself | 27. Suicide attempt |
| 13. To deal with feelings about sex or closeness | 28. Instead of suicide or to avoid suicide |
| 14. To bring myself back to reality | 29. To get help or care from someone |
| 15. To feel real or alive | 30. I do not know why |

Other reason not indicated on list: _____

18. Got into a physical fight

1	2	3	4	5	6	7
Never	Once/Twice Ever	Couple of Times a Year	Once / Twice a Month	Once / Twice a Week	Several Times a Week	Daily

If you have ever engaged in this behavior, circle the numbers of all applicable reasons:

- | | |
|------------------------------------------------------|------------------------------------------------|
| 1. For fun | 16. To achieve a feeling of peace |
| 2. For the rush of adrenaline or excitement | 17. To reduce tension or anxiety |
| 3. My friends or family did it or taught me to do it | 18. To "numb out" or "space out" |
| 4. To distract from feelings or thoughts | 19. To escape from reality |
| 5. To deal with physical pain instead of mental pain | 20. To deal with feelings of loneliness |
| 6. To distract from memories | 21. To purify myself or a part of myself |
| 7. To show the pain I felt inside | 22. To feel powerful |
| 8. To see blood | 23. To gain control over my body |
| 9. To get a reaction from someone | 24. To become sexually aroused or stimulated |
| 10. To express anger or frustration at someone else | 25. To protect people who are important to me |
| 11. To punish myself for something | 26. To re-enact or replay events from the past |
| 12. To express anger or frustration at myself | 27. Suicide attempt |
| 13. To deal with feelings about sex or closeness | 28. Instead of suicide or to avoid suicide |
| 14. To bring myself back to reality | 29. To get help or care from someone |
| 15. To feel real or alive | 30. I do not know why |

Other reason not indicated on list: _____

19. Engaged in unprotected sex

1	2	3	4	5	6	7
Never	Once/Twice Ever	Couple of Times a Year	Once / Twice a Month	Once / Twice a Week	Several Times a Week	Daily

If you have ever engaged in this behavior, circle the numbers of all applicable reasons:

- | | |
|------------------------------------------------------|------------------------------------------------|
| 1. For fun | 16. To achieve a feeling of peace |
| 2. For the rush of adrenaline or excitement | 17. To reduce tension or anxiety |
| 3. My friends or family did it or taught me to do it | 18. To "numb out" or "space out" |
| 4. To distract from feelings or thoughts | 19. To escape from reality |
| 5. To deal with physical pain instead of mental pain | 20. To deal with feelings of loneliness |
| 6. To distract from memories | 21. To purify myself or a part of myself |
| 7. To show the pain I felt inside | 22. To feel powerful |
| 8. To see blood | 23. To gain control over my body |
| 9. To get a reaction from someone | 24. To become sexually aroused or stimulated |
| 10. To express anger or frustration at someone else | 25. To protect people who are important to me |
| 11. To punish myself for something | 26. To re-enact or replay events from the past |
| 12. To express anger or frustration at myself | 27. Suicide attempt |
| 13. To deal with feelings about sex or closeness | 28. Instead of suicide or to avoid suicide |
| 14. To bring myself back to reality | 29. To get help or care from someone |
| 15. To feel real or alive | 30. I do not know why |

Other reason not indicated on list: _____

20. Pinched your body on purpose until bruising or pain occurred

1	2	3	4	5	6	7
Never	Once/Twice Ever	Couple of Times a Year	Once / Twice a Month	Once / Twice a Week	Several Times a Week	Daily

If you have ever engaged in this behavior, circle the numbers of all applicable reasons:

- | | |
|------------------------------------------------------|------------------------------------------------|
| 1. For fun | 16. To achieve a feeling of peace |
| 2. For the rush of adrenaline or excitement | 17. To reduce tension or anxiety |
| 3. My friends or family did it or taught me to do it | 18. To "numb out" or "space out" |
| 4. To distract from feelings or thoughts | 19. To escape from reality |
| 5. To deal with physical pain instead of mental pain | 20. To deal with feelings of loneliness |
| 6. To distract from memories | 21. To purify myself or a part of myself |
| 7. To show the pain I felt inside | 22. To feel powerful |
| 8. To see blood | 23. To gain control over my body |
| 9. To get a reaction from someone | 24. To become sexually aroused or stimulated |
| 10. To express anger or frustration at someone else | 25. To protect people who are important to me |
| 11. To punish myself for something | 26. To re-enact or replay events from the past |
| 12. To express anger or frustration at myself | 27. Suicide attempt |
| 13. To deal with feelings about sex or closeness | 28. Instead of suicide or to avoid suicide |
| 14. To bring myself back to reality | 29. To get help or care from someone |
| 15. To feel real or alive | 30. I do not know why |

Other reason not indicated on list: _____

21. Cut or gouged your body with a razor, broken glass, etc. on purpose

1	2	3	4	5	6	7
Never	Once/Twice Ever	Couple of Times a Year	Once / Twice a Month	Once / Twice a Week	Several Times a Week	Daily

If you have ever engaged in this behavior, circle the numbers of all applicable reasons:

- | | |
|------------------------------------------------------|------------------------------------------------|
| 1. For fun | 16. To achieve a feeling of peace |
| 2. For the rush of adrenaline or excitement | 17. To reduce tension or anxiety |
| 3. My friends or family did it or taught me to do it | 18. To "numb out" or "space out" |
| 4. To distract from feelings or thoughts | 19. To escape from reality |
| 5. To deal with physical pain instead of mental pain | 20. To deal with feelings of loneliness |
| 6. To distract from memories | 21. To purify myself or a part of myself |
| 7. To show the pain I felt inside | 22. To feel powerful |
| 8. To see blood | 23. To gain control over my body |
| 9. To get a reaction from someone | 24. To become sexually aroused or stimulated |
| 10. To express anger or frustration at someone else | 25. To protect people who are important to me |
| 11. To punish myself for something | 26. To re-enact or replay events from the past |
| 12. To express anger or frustration at myself | 27. Suicide attempt |
| 13. To deal with feelings about sex or closeness | 28. Instead of suicide or to avoid suicide |
| 14. To bring myself back to reality | 29. To get help or care from someone |
| 15. To feel real or alive | 30. I do not know why |

Other reason not indicated on list: _____

22. Burned yourself with a lit cigarette, match, or lighter on purpose

1	2	3	4	5	6	7
Never	Once/Twice Ever	Couple of Times a Year	Once / Twice a Month	Once / Twice a Week	Several Times a Week	Daily

If you have ever engaged in this behavior, circle the numbers of all applicable reasons:

- | | |
|------------------------------------------------------|------------------------------------------------|
| 1. For fun | 16. To achieve a feeling of peace |
| 2. For the rush of adrenaline or excitement | 17. To reduce tension or anxiety |
| 3. My friends or family did it or taught me to do it | 18. To "numb out" or "space out" |
| 4. To distract from feelings or thoughts | 19. To escape from reality |
| 5. To deal with physical pain instead of mental pain | 20. To deal with feelings of loneliness |
| 6. To distract from memories | 21. To purify myself or a part of myself |
| 7. To show the pain I felt inside | 22. To feel powerful |
| 8. To see blood | 23. To gain control over my body |
| 9. To get a reaction from someone | 24. To become sexually aroused or stimulated |
| 10. To express anger or frustration at someone else | 25. To protect people who are important to me |
| 11. To punish myself for something | 26. To re-enact or replay events from the past |
| 12. To express anger or frustration at myself | 27. Suicide attempt |
| 13. To deal with feelings about sex or closeness | 28. Instead of suicide or to avoid suicide |
| 14. To bring myself back to reality | 29. To get help or care from someone |
| 15. To feel real or alive | 30. I do not know why |

Other reason not indicated on list: _____

23. Banged your head against a hard surface on purpose

1	2	3	4	5	6	7
Never	Once/Twice Ever	Couple of Times a Year	Once / Twice a Month	Once / Twice a Week	Several Times a Week	Daily

If you have ever engaged in this behavior, circle the numbers of all applicable reasons:

- | | |
|------------------------------------------------------|------------------------------------------------|
| 1. For fun | 16. To achieve a feeling of peace |
| 2. For the rush of adrenaline or excitement | 17. To reduce tension or anxiety |
| 3. My friends or family did it or taught me to do it | 18. To "numb out" or "space out" |
| 4. To distract from feelings or thoughts | 19. To escape from reality |
| 5. To deal with physical pain instead of mental pain | 20. To deal with feelings of loneliness |
| 6. To distract from memories | 21. To purify myself or a part of myself |
| 7. To show the pain I felt inside | 22. To feel powerful |
| 8. To see blood | 23. To gain control over my body |
| 9. To get a reaction from someone | 24. To become sexually aroused or stimulated |
| 10. To express anger or frustration at someone else | 25. To protect people who are important to me |
| 11. To punish myself for something | 26. To re-enact or replay events from the past |
| 12. To express anger or frustration at myself | 27. Suicide attempt |
| 13. To deal with feelings about sex or closeness | 28. Instead of suicide or to avoid suicide |
| 14. To bring myself back to reality | 29. To get help or care from someone |
| 15. To feel real or alive | 30. I do not know why |

Other reason not indicated on list: _____

24. Slapped yourself or hit yourself with something on purpose

1	2	3	4	5	6	7
Never	Once/Twice Ever	Couple of Times a Year	Once / Twice a Month	Once / Twice a Week	Several Times a Week	Daily

If you have ever engaged in this behavior, circle the numbers of all applicable reasons:

- | | |
|------------------------------------------------------|------------------------------------------------|
| 1. For fun | 16. To achieve a feeling of peace |
| 2. For the rush of adrenaline or excitement | 17. To reduce tension or anxiety |
| 3. My friends or family did it or taught me to do it | 18. To "numb out" or "space out" |
| 4. To distract from feelings or thoughts | 19. To escape from reality |
| 5. To deal with physical pain instead of mental pain | 20. To deal with feelings of loneliness |
| 6. To distract from memories | 21. To purify myself or a part of myself |
| 7. To show the pain I felt inside | 22. To feel powerful |
| 8. To see blood | 23. To gain control over my body |
| 9. To get a reaction from someone | 24. To become sexually aroused or stimulated |
| 10. To express anger or frustration at someone else | 25. To protect people who are important to me |
| 11. To punish myself for something | 26. To re-enact or replay events from the past |
| 12. To express anger or frustration at myself | 27. Suicide attempt |
| 13. To deal with feelings about sex or closeness | 28. Instead of suicide or to avoid suicide |
| 14. To bring myself back to reality | 29. To get help or care from someone |
| 15. To feel real or alive | 30. I do not know why |

Other reason not indicated on list: _____

25. Punched walls or other objects on purpose

1	2	3	4	5	6	7
Never	Once/Twice Ever	Couple of Times a Year	Once / Twice a Month	Once / Twice a Week	Several Times a Week	Daily

If you have ever engaged in this behavior, circle the numbers of all applicable reasons:

- | | |
|------------------------------------------------------|------------------------------------------------|
| 1. For fun | 16. To achieve a feeling of peace |
| 2. For the rush of adrenaline or excitement | 17. To reduce tension or anxiety |
| 3. My friends or family did it or taught me to do it | 18. To "numb out" or "space out" |
| 4. To distract from feelings or thoughts | 19. To escape from reality |
| 5. To deal with physical pain instead of mental pain | 20. To deal with feelings of loneliness |
| 6. To distract from memories | 21. To purify myself or a part of myself |
| 7. To show the pain I felt inside | 22. To feel powerful |
| 8. To see blood | 23. To gain control over my body |
| 9. To get a reaction from someone | 24. To become sexually aroused or stimulated |
| 10. To express anger or frustration at someone else | 25. To protect people who are important to me |
| 11. To punish myself for something | 26. To re-enact or replay events from the past |
| 12. To express anger or frustration at myself | 27. Suicide attempt |
| 13. To deal with feelings about sex or closeness | 28. Instead of suicide or to avoid suicide |
| 14. To bring myself back to reality | 29. To get help or care from someone |
| 15. To feel real or alive | 30. I do not know why |

Other reason not indicated on list: _____

26. Engaged in sexual behaviors that led to physical pain or injury

1	2	3	4	5	6	7
Never	Once/Twice Ever	Couple of Times a Year	Once / Twice a Month	Once / Twice a Week	Several Times a Week	Daily

If you have ever engaged in this behavior, circle the numbers of all applicable reasons:

- | | |
|------------------------------------------------------|------------------------------------------------|
| 1. For fun | 16. To achieve a feeling of peace |
| 2. For the rush of adrenaline or excitement | 17. To reduce tension or anxiety |
| 3. My friends or family did it or taught me to do it | 18. To "numb out" or "space out" |
| 4. To distract from feelings or thoughts | 19. To escape from reality |
| 5. To deal with physical pain instead of mental pain | 20. To deal with feelings of loneliness |
| 6. To distract from memories | 21. To purify myself or a part of myself |
| 7. To show the pain I felt inside | 22. To feel powerful |
| 8. To see blood | 23. To gain control over my body |
| 9. To get a reaction from someone | 24. To become sexually aroused or stimulated |
| 10. To express anger or frustration at someone else | 25. To protect people who are important to me |
| 11. To punish myself for something | 26. To re-enact or replay events from the past |
| 12. To express anger or frustration at myself | 27. Suicide attempt |
| 13. To deal with feelings about sex or closeness | 28. Instead of suicide or to avoid suicide |
| 14. To bring myself back to reality | 29. To get help or care from someone |
| 15. To feel real or alive | 30. I do not know why |

Other reason not indicated on list: _____

27. Scratched your skin on purpose till it hurt or bled

1	2	3	4	5	6	7
Never	Once/Twice Ever	Couple of Times a Year	Once / Twice a Month	Once / Twice a Week	Several Times a Week	Daily

If you have ever engaged in this behavior, circle the numbers of all applicable reasons:

- | | |
|------------------------------------------------------|------------------------------------------------|
| 1. For fun | 16. To achieve a feeling of peace |
| 2. For the rush of adrenaline or excitement | 17. To reduce tension or anxiety |
| 3. My friends or family did it or taught me to do it | 18. To "numb out" or "space out" |
| 4. To distract from feelings or thoughts | 19. To escape from reality |
| 5. To deal with physical pain instead of mental pain | 20. To deal with feelings of loneliness |
| 6. To distract from memories | 21. To purify myself or a part of myself |
| 7. To show the pain I felt inside | 22. To feel powerful |
| 8. To see blood | 23. To gain control over my body |
| 9. To get a reaction from someone | 24. To become sexually aroused or stimulated |
| 10. To express anger or frustration at someone else | 25. To protect people who are important to me |
| 11. To punish myself for something | 26. To re-enact or replay events from the past |
| 12. To express anger or frustration at myself | 27. Suicide attempt |
| 13. To deal with feelings about sex or closeness | 28. Instead of suicide or to avoid suicide |
| 14. To bring myself back to reality | 29. To get help or care from someone |
| 15. To feel real or alive | 30. I do not know why |

Other reason not indicated on list: _____

28. Picked at scabs, fingernails, or cuticles on purpose till they hurt or bled

1	2	3	4	5	6	7
Never	Once/Twice Ever	Couple of Times a Year	Once / Twice a Month	Once / Twice a Week	Several Times a Week	Daily

If you have ever engaged in this behavior, circle the numbers of all applicable reasons:

- | | |
|------------------------------------------------------|------------------------------------------------|
| 1. For fun | 16. To achieve a feeling of peace |
| 2. For the rush of adrenaline or excitement | 17. To reduce tension or anxiety |
| 3. My friends or family did it or taught me to do it | 18. To "numb out" or "space out" |
| 4. To distract from feelings or thoughts | 19. To escape from reality |
| 5. To deal with physical pain instead of mental pain | 20. To deal with feelings of loneliness |
| 6. To distract from memories | 21. To purify myself or a part of myself |
| 7. To show the pain I felt inside | 22. To feel powerful |
| 8. To see blood | 23. To gain control over my body |
| 9. To get a reaction from someone | 24. To become sexually aroused or stimulated |
| 10. To express anger or frustration at someone else | 25. To protect people who are important to me |
| 11. To punish myself for something | 26. To re-enact or replay events from the past |
| 12. To express anger or frustration at myself | 27. Suicide attempt |
| 13. To deal with feelings about sex or closeness | 28. Instead of suicide or to avoid suicide |
| 14. To bring myself back to reality | 29. To get help or care from someone |
| 15. To feel real or alive | 30. I do not know why |

Other reason not indicated on list: _____

29. Pulled on your hair on purpose until it hurt or came out

1	2	3	4	5	6	7
Never	Once/Twice Ever	Couple of Times a Year	Once / Twice a Month	Once / Twice a Week	Several Times a Week	Daily

If you have ever engaged in this behavior, circle the numbers of all applicable reasons:

- | | |
|------------------------------------------------------|------------------------------------------------|
| 1. For fun | 16. To achieve a feeling of peace |
| 2. For the rush of adrenaline or excitement | 17. To reduce tension or anxiety |
| 3. My friends or family did it or taught me to do it | 18. To "numb out" or "space out" |
| 4. To distract from feelings or thoughts | 19. To escape from reality |
| 5. To deal with physical pain instead of mental pain | 20. To deal with feelings of loneliness |
| 6. To distract from memories | 21. To purify myself or a part of myself |
| 7. To show the pain I felt inside | 22. To feel powerful |
| 8. To see blood | 23. To gain control over my body |
| 9. To get a reaction from someone | 24. To become sexually aroused or stimulated |
| 10. To express anger or frustration at someone else | 25. To protect people who are important to me |
| 11. To punish myself for something | 26. To re-enact or replay events from the past |
| 12. To express anger or frustration at myself | 27. Suicide attempt |
| 13. To deal with feelings about sex or closeness | 28. Instead of suicide or to avoid suicide |
| 14. To bring myself back to reality | 29. To get help or care from someone |
| 15. To feel real or alive | 30. I do not know why |

Other reason not indicated on list: _____

30. Ate toxic substances or sharp objects (e.g., razor blades, staples) on purpose

1	2	3	4	5	6	7
Never	Once/Twice Ever	Couple of Times a Year	Once / Twice a Month	Once / Twice a Week	Several Times a Week	Daily

If you have ever engaged in this behavior, circle the numbers of all applicable reasons:

- | | |
|------------------------------------------------------|------------------------------------------------|
| 1. For fun | 16. To achieve a feeling of peace |
| 2. For the rush of adrenaline or excitement | 17. To reduce tension or anxiety |
| 3. My friends or family did it or taught me to do it | 18. To "numb out" or "space out" |
| 4. To distract from feelings or thoughts | 19. To escape from reality |
| 5. To deal with physical pain instead of mental pain | 20. To deal with feelings of loneliness |
| 6. To distract from memories | 21. To purify myself or a part of myself |
| 7. To show the pain I felt inside | 22. To feel powerful |
| 8. To see blood | 23. To gain control over my body |
| 9. To get a reaction from someone | 24. To become sexually aroused or stimulated |
| 10. To express anger or frustration at someone else | 25. To protect people who are important to me |
| 11. To punish myself for something | 26. To re-enact or replay events from the past |
| 12. To express anger or frustration at myself | 27. Suicide attempt |
| 13. To deal with feelings about sex or closeness | 28. Instead of suicide or to avoid suicide |
| 14. To bring myself back to reality | 29. To get help or care from someone |
| 15. To feel real or alive | 30. I do not know why |

Other reason not indicated on list: _____

31. Bit yourself on purpose

1	2	3	4	5	6	7
Never	Once/Twice Ever	Couple of Times a Year	Once / Twice a Month	Once / Twice a Week	Several Times a Week	Daily

If you have ever engaged in this behavior, circle the numbers of all applicable reasons:

- | | |
|------------------------------------------------------|------------------------------------------------|
| 1. For fun | 16. To achieve a feeling of peace |
| 2. For the rush of adrenaline or excitement | 17. To reduce tension or anxiety |
| 3. My friends or family did it or taught me to do it | 18. To "numb out" or "space out" |
| 4. To distract from feelings or thoughts | 19. To escape from reality |
| 5. To deal with physical pain instead of mental pain | 20. To deal with feelings of loneliness |
| 6. To distract from memories | 21. To purify myself or a part of myself |
| 7. To show the pain I felt inside | 22. To feel powerful |
| 8. To see blood | 23. To gain control over my body |
| 9. To get a reaction from someone | 24. To become sexually aroused or stimulated |
| 10. To express anger or frustration at someone else | 25. To protect people who are important to me |
| 11. To punish myself for something | 26. To re-enact or replay events from the past |
| 12. To express anger or frustration at myself | 27. Suicide attempt |
| 13. To deal with feelings about sex or closeness | 28. Instead of suicide or to avoid suicide |
| 14. To bring myself back to reality | 29. To get help or care from someone |
| 15. To feel real or alive | 30. I do not know why |

Other reason not indicated on list: _____

32. Other behavior(s) not listed _____

1	2	3	4	5	6	7
Never	Once/Twice Ever	Couple of Times a Year	Once / Twice a Month	Once / Twice a Week	Several Times a Week	Daily

If you have ever engaged in this behavior, circle the numbers of all applicable reasons:

- | | |
|------------------------------------------------------|------------------------------------------------|
| 1. For fun | 16. To achieve a feeling of peace |
| 2. For the rush of adrenaline or excitement | 17. To reduce tension or anxiety |
| 3. My friends or family did it or taught me to do it | 18. To "numb out" or "space out" |
| 4. To distract from feelings or thoughts | 19. To escape from reality |
| 5. To deal with physical pain instead of mental pain | 20. To deal with feelings of loneliness |
| 6. To distract from memories | 21. To purify myself or a part of myself |
| 7. To show the pain I felt inside | 22. To feel powerful |
| 8. To see blood | 23. To gain control over my body |
| 9. To get a reaction from someone | 24. To become sexually aroused or stimulated |
| 10. To express anger or frustration at someone else | 25. To protect people who are important to me |
| 11. To punish myself for something | 26. To re-enact or replay events from the past |
| 12. To express anger or frustration at myself | 27. Suicide attempt |
| 13. To deal with feelings about sex or closeness | 28. Instead of suicide or to avoid suicide |
| 14. To bring myself back to reality | 29. To get help or care from someone |
| 15. To feel real or alive | 30. I do not know why |

Other reason not indicated on list: _____

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